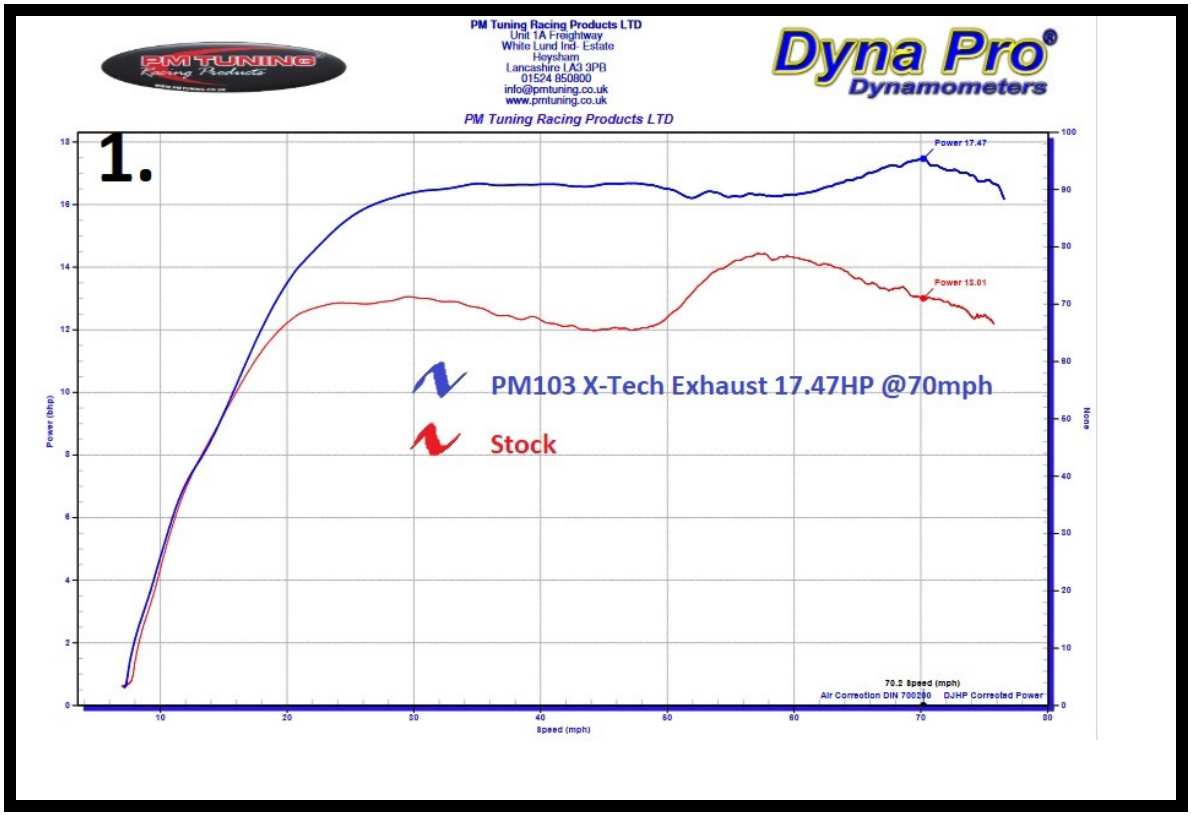


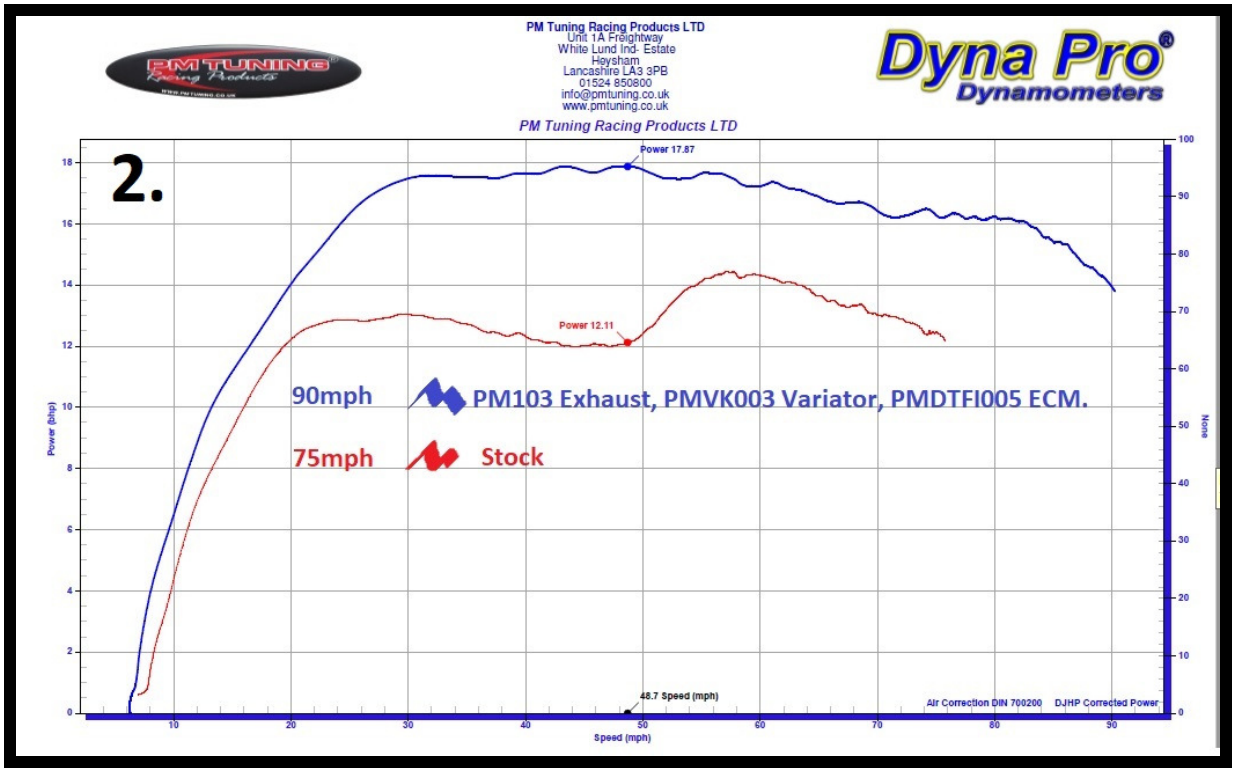

**ITALJET DRAGSTER 200 4VTC 2021>**

**Graph 1.**

**Stage 1. Stock machine versus our PM103 X-Tech exhaust system.**

As you can see on graph 1. the stock machine power peaked at around 14.40HP with sluggish performance upto peak at around 70mph before fading back off for a terminal top speed of around 75mph at this point the power has declined to just over 12HP and has hit the rev limiter.

With the PM103 exhaust the results show a dramatic increase from the low speed range all the way up with peak power topping out @ 17.47 -70mph before tailing off to just over 16HP @77mph as the engine rev limiter cuts back in.

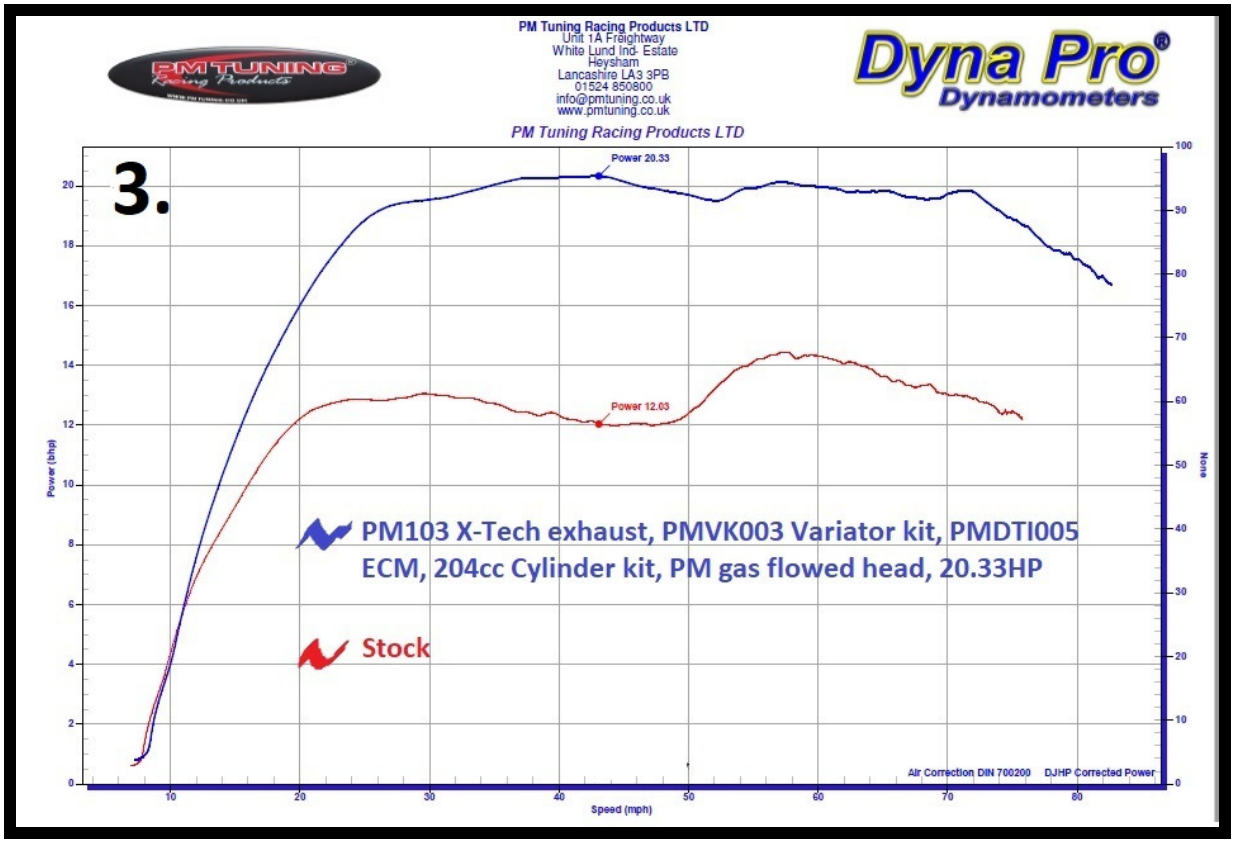



**Graph 2.**

**Stage 2. Stock machine versus PM103 X-Tech exhaust, PMVK003 variator kit, and PMDTFI005 (ECM) Engine Control Module.**

Dwarfing the stock power curve in every way, and really lighting up the performance, Strong acceleration peaking at 17.87 HP, big difference here is extended mid to top speed range of 16HP @80mph and 90mph with 14HP.

Acceleration and over range top speed is optimised by the calibrated PMVK003 variator kit. O2 sensor override and air fuel ratio correction is handled by ECM controller giving an impressive bolt on package that's plug and play ready, simply bolt it all on and go.




**Graph 3.**

**Stage 3-4. Stock machine versus PM103 X-Tech exhaust, PMVK003 variator kit, PMDTFI005 (ECM) Engine Control Module, Malossi 204cc alloy cylinder kit, PM gas flowed cylinder head, Stage 4. PMAFK002 sports filter kit.**

This conversion is usally purchased as an in house fitting option if going for the gas flowed head, as the machine requires the engine out of the frame for the cylinder head to be removed and hand ported to flow bench specifications, the results along with the higher compression piston used on the malossi 204cc kit has improved thermal efficiency properties due to its alloy and nicasil cylinder Construction over the stock cast iron item, this and the gas flowing assists the output to an Impressive 20.33HP holding on to this power until around 72 mph before tailing off to around 17HP @85mph.

For customers that want to remove the stock air box without progressing to **Stage 3**. Can use the **Stage 4**. Air filter kit with **Stage 2.** This adds a further 0.5 HP. air/ fuel adjustment to the ECM is really Easy too, just follow the instructions push 2 buttons and you're done.

For more details and pricing please call our sales team on 01524 850800 or visit our web site.



**Our Dynamometer test set up explained.**

We are currently using a UK manufactured S68-LC Dyna-Pro load cell dyno, this dyno uses a hollow roller which is controlled by a full closed loop eddy brake, the advantage of this type of dyno is you can apply load to the roller through a sophisticated set of algorithms so the faster you go the higher the rolling resistance becomes, a pre-determined sweep load percentage will simulate anything from running up hill ,wind drag resistance, to head winds, two up fully loaded riding conditions etc. the results generated are back to back on the same dyno using a DIN700200 correction factor and the same setup parameters for each set of runs.

## PMDTFI005 Italjet Injection module

**Dragster 2021> 200 4 stroke 4VTC EU5.**


The TFI was designed and developed to provide an affordable solution to increasing the ridability of your scooter and the correction of the air fuel ratio. With today's pollution regulations, many if not all of today's scooters are setup extremely lean to meet these regulations. Unfortunately they are not always the best setup for performance or ridability. Therefore, adjusting the air fuel ratio on these machines is essential to achieve optimum performance and ridability. The ECM is not an interceptor and it does not alter factory air/fuel computer tales or pulse-width calculations. It taps into the injector-driver circuitry of a stock scooters EFI and selectively appends extra pulse-width voltage keeping injectors open the exact incremental time required for precise fuel enrichment. The scooters on-board computer and wiring harness remain intact, with no wires needing to be cut. The stock air-fuel Map remains intact, as does its correlation to the engines volumetric efficiency (breathing) curve.
This latest device also captures the lambda (o2) voltage and emulates the required information

being processed by the ECU this keeps low to mid speed fuelling in check and avoids any engine check management lights appearing.
If required the ECM is simple to adjust. Circuitry in the control unit (1) define the breakpoint between cruise and main-jet RPM, (2) the length of time and magnitude for auxiliary transitional enrichment, (3) and the incremental enrichment in tenths of milliseconds for the three operating ranges. The ECM unit is available as a pre-programmed module to optimise the PM103 fuelling requirements with easily adjustable function to low speed (green) and high speed (red) should a different setup be required (E.G. using it with the standard exhaust system or other aftermarket tuning parts) and can also be done at the side of the road if needed. Full instructions are included.

LINK TO PARTS AND PRICES:
https://www.pmtuning.co.uk/products/default/shop-by-scooterbike/italjet/scooters-180cc-and-above/dragster-200cc-lc-2020-on/

PM TUNING CNC BRAKE LEVER SETS.

As always things move on and we are constantly developing new parts for these machines for the latest products and developments please see the link above any question please email us on info@pmtuning.co.uk