



- Terima kasih telah menggunakan TDR Cylinder Block Assy X-MAX. Sebelum pemasangan, bacalah manual instruksi dengan baik. Kami sangat menyarankan untuk menyimpan instruksi manual ini dengan baik.

### ⚠ PERINGATAN

- Untuk pemasangan silahkan mengikuti tahapan sesuai petunjuk. Kerusakan dikarenakan tidak sesuai arahan tidak akan mendapatkan garansi, Pemasangan harus menggunakan alat yang tepat.
- Jangan memodifikasi parts kecuali tertulis dalam petunjuk pemasangan.
- Pengerjaan harus dilakukan oleh mekanik yang sudah terlatih.

**NOTE** Tambahan informasi detail.

⚠ Beberapa proses harus diperhatikan untuk menghindari kesalahan pemasangan.

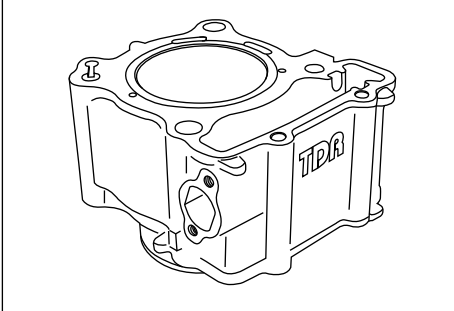
**⚠ PERINGATAN!** Beberapa proses harus diperhatikan untuk mencegah kerusakan yang membahayakan.

**⚠ PERINGATAN!** Beberapa proses harus diperhatikan untuk mencegah kerusakan pada kendaraan.

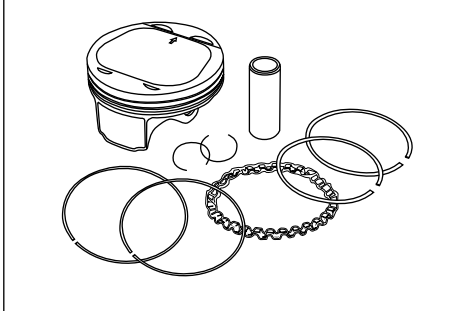
**🔧 BACA DENGAN BAIK** Jika ada informasi yang kurang jelas, silahkan menghubungi customer service kami.

### 1-1 PRODUK

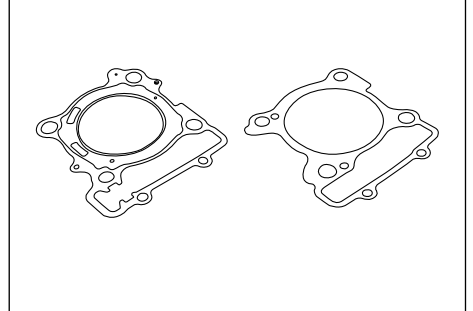
#### 1 CYLINDER BLOCK X1



#### 2 PISTON ASSY X1



#### 3 GASKET X2



**CATATAN** Hubungi distributor setempat apabila parts tidak sesuai dengan keterangan ini

### 2-1 PEMASANGAN CYLINDER BLOCK

Fig 1

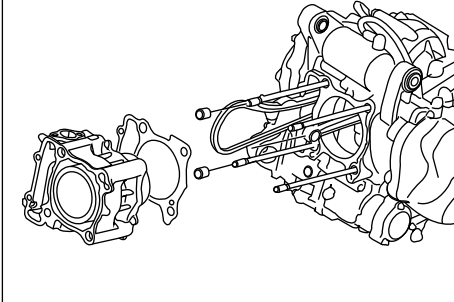
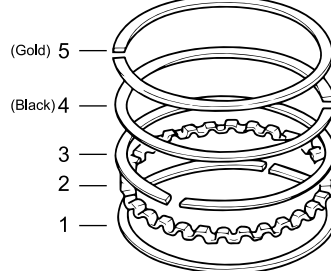


Fig 2



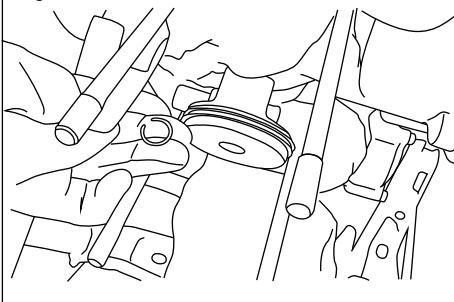
Urutan pemasangan ring piston:

- Ring oli bawah - 1
- Expander ring oli - 2
- Ring oli atas - 3
- Ring kompresi kedua (black) - 4
- Ring kompresi pertama (gold) - 5

Note:

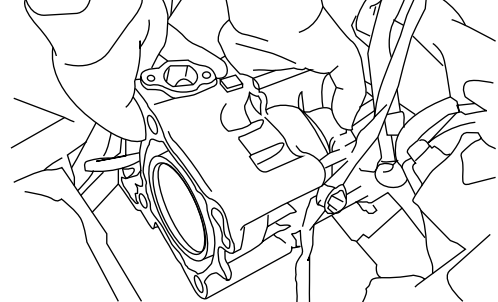
Pastikan pada saat memasang ring piston logo TDR menghadap ke atas

Fig 3



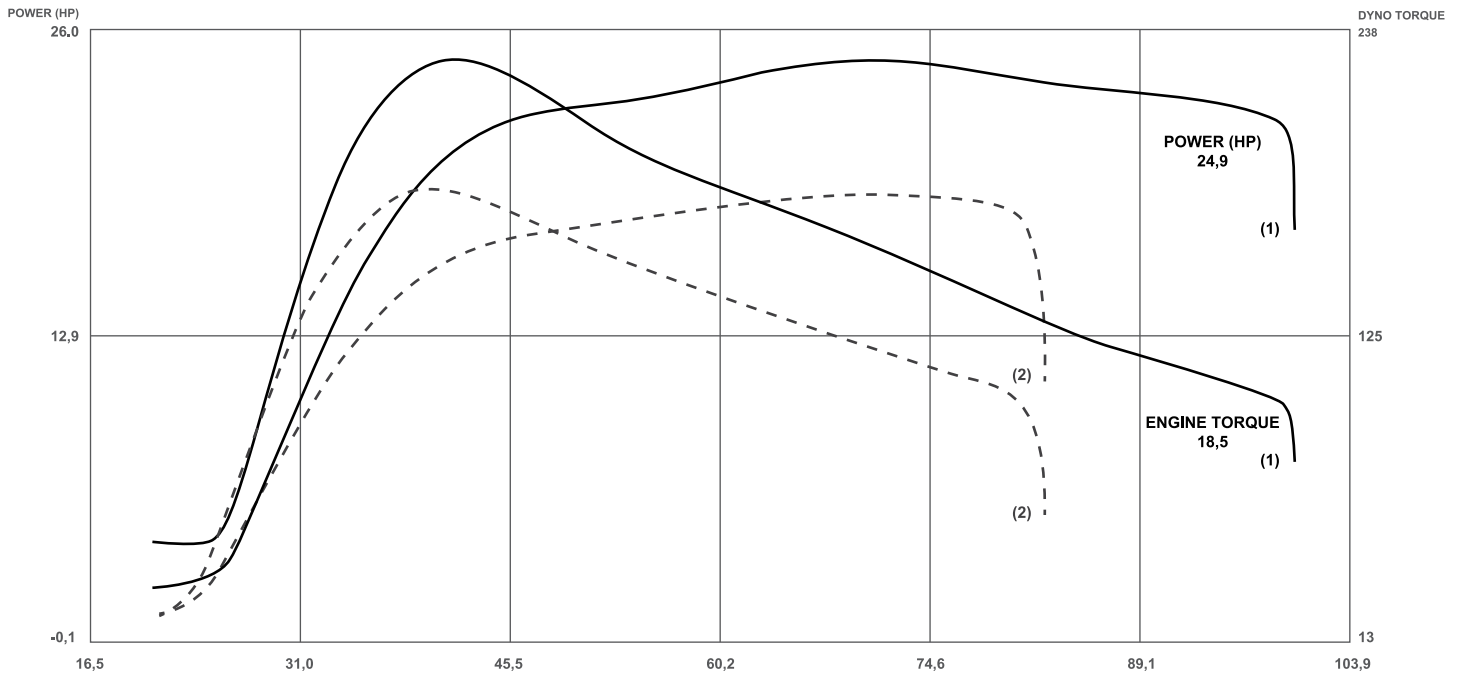
Note:  
Ketika memasang klip piston pastikan bahwa ujung klip diposisikan menjauh dari cutout pada piston.

Fig 4



1. Lepaskan Cylinder Head Dan Cylinder Block (Fig 1).
2. Lakukan Porting Polish Pada Lubang Valve In Dan Valve Ex.
3. Pemasangan Ring Piston Ke Piston (Fig 2).
4. Pasang Piston Ke Connecting Rod Kemudian Pasang Juga Klip/pengunci Pin Piston (Fig 3). Berikan Pelumas Pada Seluruh Permukaan Piston.
5. Pasang Gasket Cylinder Block Pada Crankcase.
6. Masukkan Piston Ke Dalam Cylinder Block (Fig 4). Berikan Pelumas Pada Dinding Lapisan Dalam Cylinder Block.
7. Posisikan Piston Pada Puncak (Top Dead Center).
8. Pasang Gasket Cylinder Head.
9. Pasang Cylinder Head Yang Telah Di Porting Polish.
10. Kencangkan Semua Baut Menggunakan Kunci Torsi.

### 3 HASIL KURVA DYNO TEST



- CATATAN** TDR Cylinder block Power (HP) 24,9 & Engine Torque 18,5 (1)
- CATATAN** Cylinder block standard Power (HP) 19,1 & Engine Torque 14,3 (2)
- CATATAN** Hasil test dapat berbeda dikarenakan kondisi suhu. Tabel ini hanya sebagai referensi



- Thank you for purchasing TDR Cylinder Block Assy X-MAX. Upon installation please read this instruction manual carefully. It is strongly recommended to keep this manual for future references.

## ⚠ WARNING

- To install please follow each step according to this manual, Any damage caused by the failure to follow the instructions printed on this manual will void warranty.
- Do not modify any part unless instructed.
- Installation must only be done by certified mechanic.

## NOTE Additional information

⚠ Processes that need attention to avoid installation mistakes.

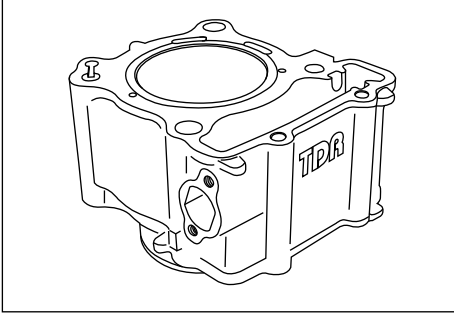
⚠ **WARNING** Processes that need attention to avoid fatal damage.

⚠ **WARNING** Processes that need attention to avoid damage to your vehicle.

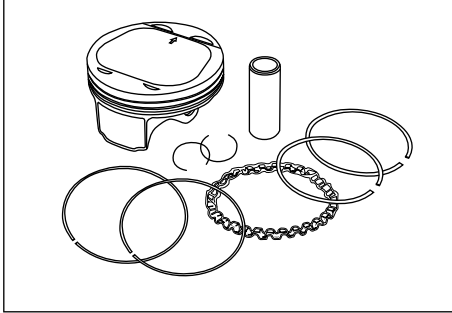
📖 **READ CAREFULLY!** If further information needed please contact our customer service.

## 1-1 PRODUCT

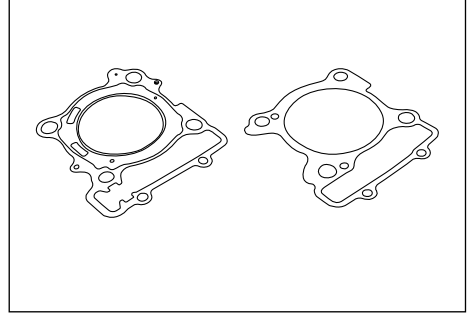
### 1 CYLINDER BLOCK X1



### 2 PISTON ASSY X1



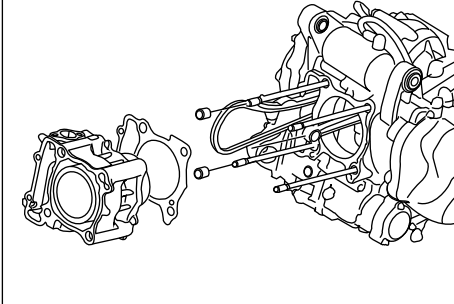
### 3 GASKET X2



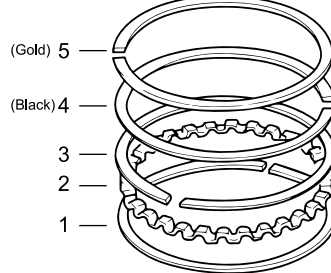
**NOTE** Please contact our local distributor if the parts not same with this contents of the package

## 2-1 CYLINDER BLOCK INSTALLATION

Pic 1



Pic 2



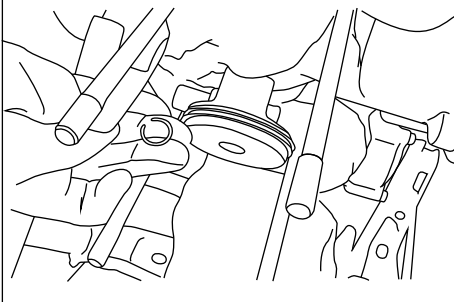
Piston Ring Installation in order:

- Bottom oil ring - 1
- Oil ring expander - 2
- Top oil ring - 3
- 2nd compression ring (black) - 4
- 1st compression ring (gold) - 5

Note:

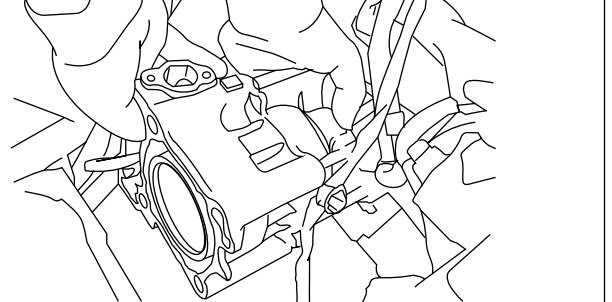
Make sure the TDR logo facing up when installing the piston ring.

Pic 3



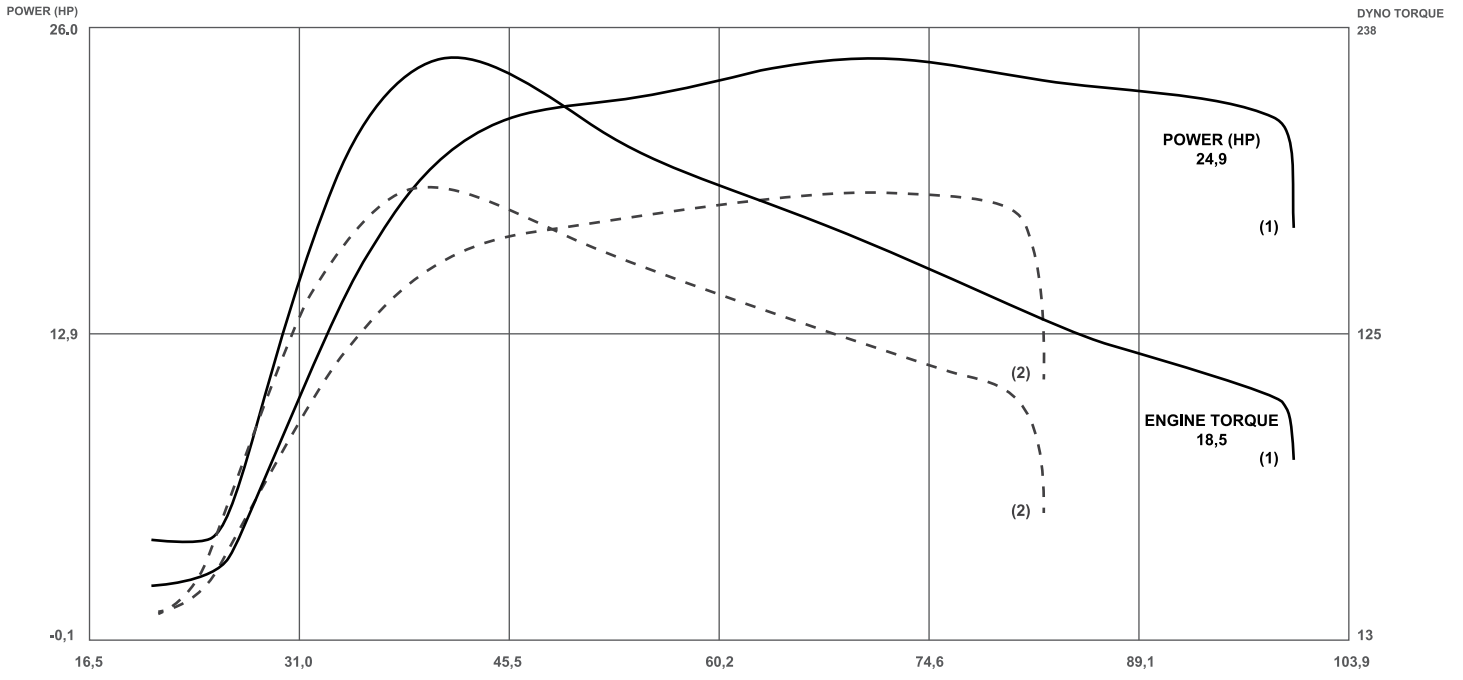
Note:  
When installing piston clip, make sure that the clip edge position far from piston cutout.

Pic 4



1. Release Cylinder Head And Cylinder Block (Pic 1)..
2. Do Porting Polish On Valve In And Valve Ex Holes.
3. Install Ring Pistons To Pistons (Pic 2).
4. Install The Piston To Connecting Rod Then Install The Clip / Lock Of The Piston Pin (Pic 3). Lubricate All Surface Of The Piston.
5. Install Cylinder Block Gaskets On Crankcase.
6. Piston The Piston Into The Cylinder Block (Pic 4). Give Lubricants On The Layer Wall In The Cylinder Block.
7. Make Piston Position On The Top (Top Dead Center).
8. Install Cylinder Head Gaskets.
9. Reinstall the cylinder head with the polished intake and exhaust ports.
10. Tighten All Bolts Using The Torque Key.

### 3 DYNO TEST RESULT CHART



**NOTE** TDR Cylinder block Power (HP) 24,9 & Engine Torque 18,5 (1)

**NOTE** Cylinder block standard Power (HP) 19,1 & Engine Torque 14,3 (2)

**NOTE** Test result may vary because of temperature difference. Chart for references only.