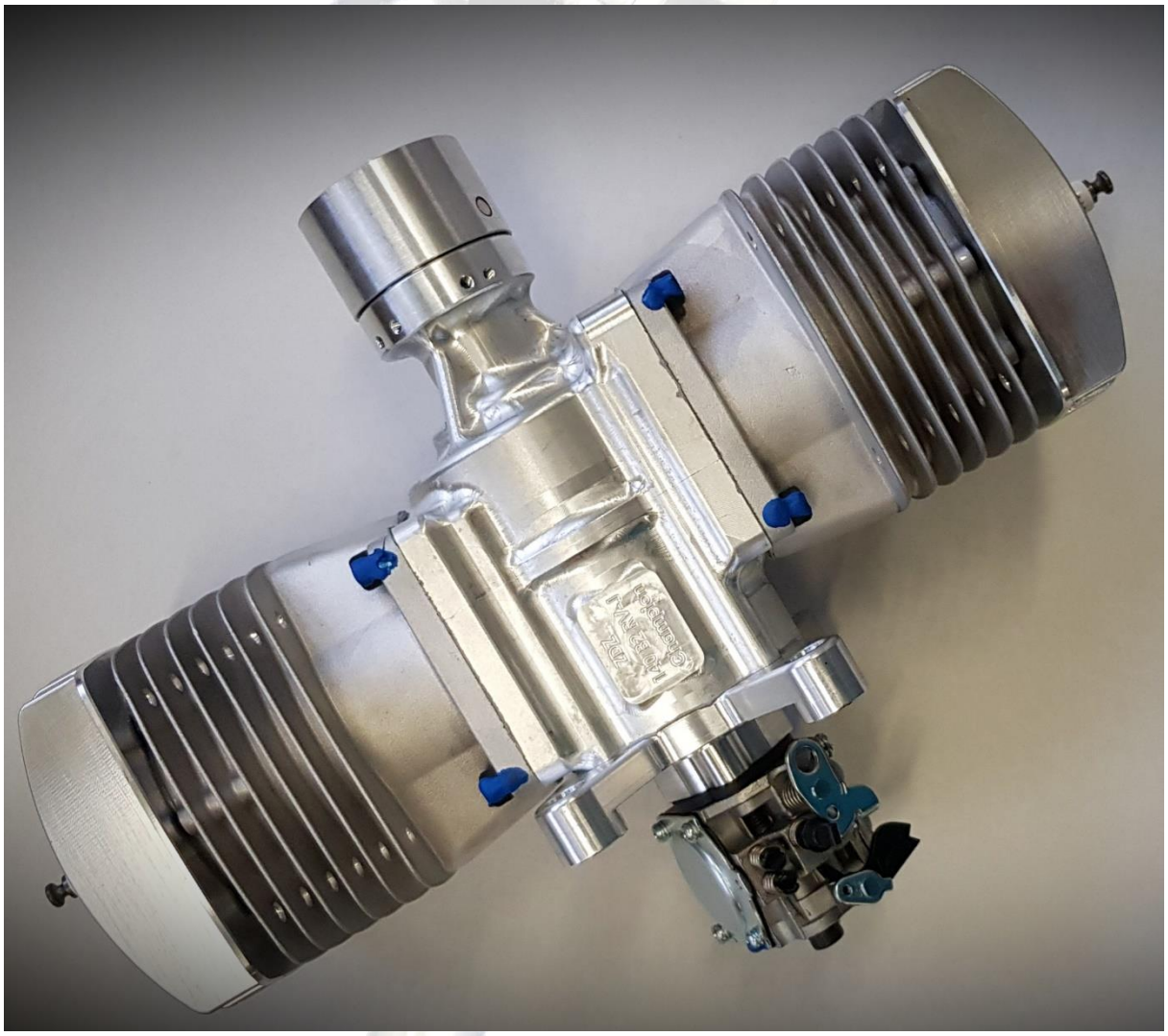
DATASHEET
ADX 140



ADX 140 ENGINE

ADX 140 gasoline engine is intended for applications and offers excellent power to weight ratio while having absolutely low vibrations thanks to its construction and balanced internals. During its development all the knowledge and experience from previous models were applied and improved. The result is powerfull, low vibration and very durable and reliable engine with improved cooling for easier usage.

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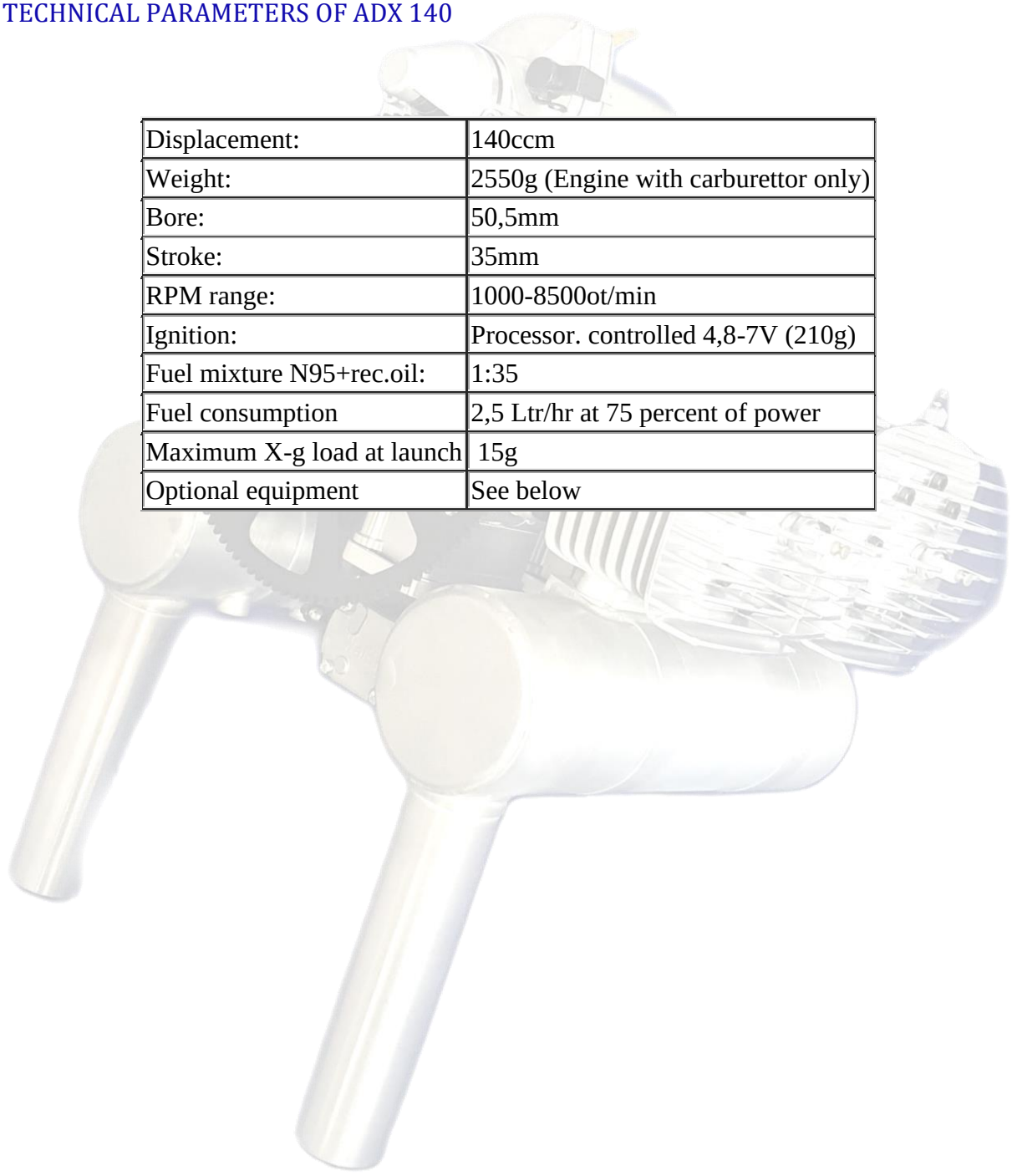
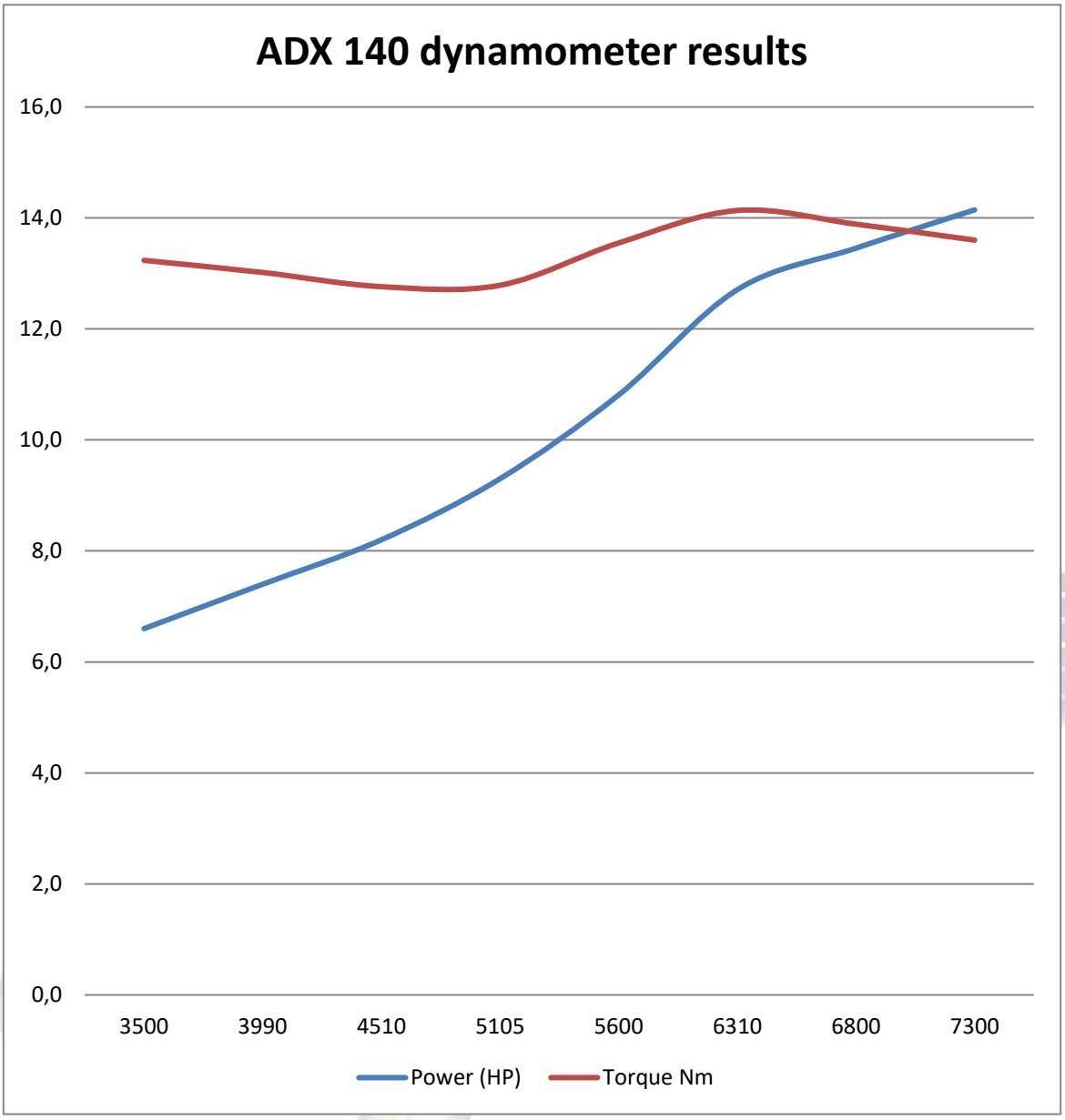
There is rarely need for the user to make much in the way of adjustments. In general, they require only some minor carburettor adjustments that take into consideration the propellers and mufflers being used.

TECHNICAL PARAMETERS OF ADX 140



Displacement:	140ccm
Weight:	2550g (Engine with carburettor only)
Bore:	50,5mm
Stroke:	35mm
RPM range:	1000-8500ot/min
Ignition:	Processor. controlled 4,8-7V (210g)
Fuel mixture N95+rec.oil:	1:35
Fuel consumption	2,5 Ltr/hr at 75 percent of power
Maximum X-g load at launch	15g
Optional equipment	See below

DYNAMOMETER RESULTS



GENERAL

All ADX engines are equipped with diaphragm carburettors made by Walbro. (These carburettors are adjusted with two mixture screws that are marked with the letter "H" (for the adjustment of High speed) and by the letter "L" (for the adjustment of idle and the acceleration from idle to full throttle). ADX engines are equipped with commonly sized special SKF and NSK ball bearings. The piston con rod is equipped with SKF needle bearings. All screws and connections are secured by Loctite 243/648 and market for controll.

EACH engine as mentioned above is tested before shipment and test result recorded to its birthcard in our information system as well as all other events and repairs in the future during the engine lifetime.

IGNITION SYSTEM

On ADX 140 engine you can find one/two sets of processor controlled ignition with controlled advanced spark timing

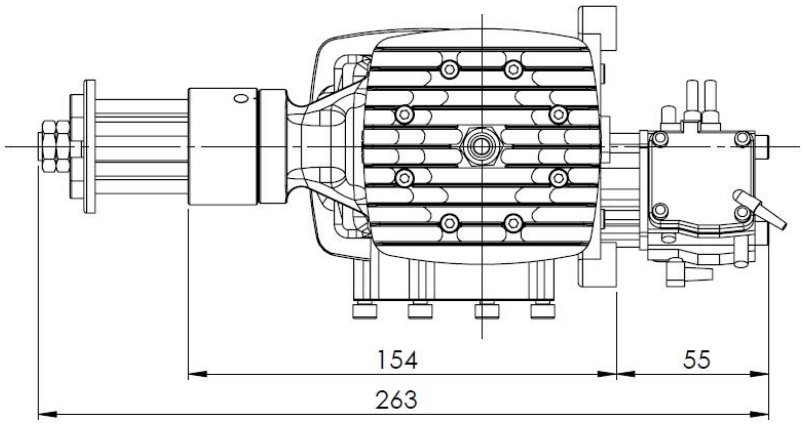
Illustrative photo

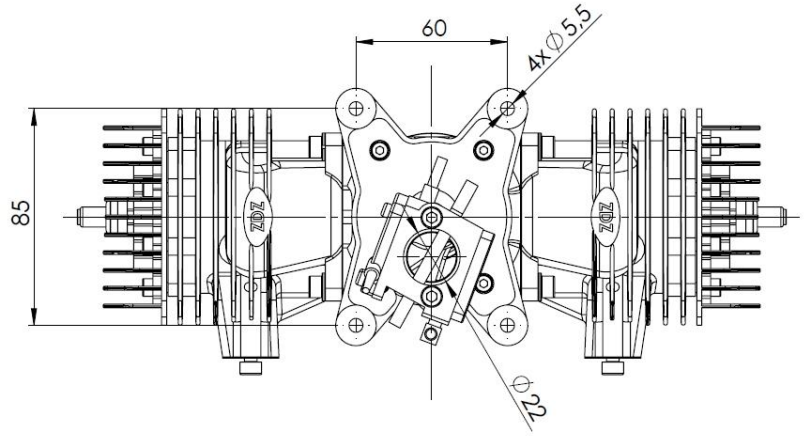
OPTIONAL EQUIPMENT

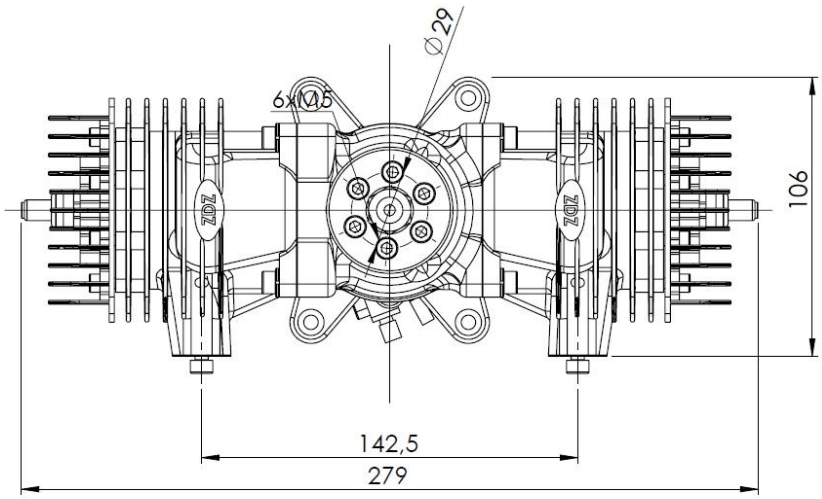
ADX 140 engine can be optionally equipped with additional accessories or modifed with new features as shown in the table below.

1. **Rotation Options:** Our engines can be customized to operate in either a clockwise (CW) or counterclockwise (CCW) rotation. This provides flexibility to choose the rotation that best suits your specific system requirements.
2. **Exhaust sytsem:** You can choose betwen standard SSA compact and direct mount systém or specific solution.
3. **Double Spark Plug Heads:** Engines can be equipped with double spark plug heads to increase safety and reliability. This feature ensures that your engine continues to operate in the event of a spark plug failure, offering uninterrupted performance and peace of mind.
4. **Additional Sensor Mounting Position:** Engines could be equipped with an additional sensor mounting position on either the cylinder heads or crankcase. This provides the flexibility to tailor the engine to your exact needs, allowing you to achieve optimal performance and functionality.
5. **Cylinder Head Redesign:** Our engines can be completely redesigned to provide easier cooling or fit into your cowl space. This feature ensures that your engine not only performs at its best, but also fits seamlessly into your system.
6. **Electric Starter:** Engines could be equipped with an electric starter for easy and efficient start-up. This feature saves time and effort, allowing you to focus on your work and get the job done quickly and efficiently.
7. **Automatic Deco Valves:** Engines could be equipped with automatic deco valves, making restarts in the air easy and stress-free. This feature allows you to focus on your flight and enjoy a smoother and more comfortable experience.
8. **Power Generator:** Engines can be designed with brushless generators that provide superior power to meet your specific needs. This feature ensures that you have the power you need to operate all of your equipment, no matter what the situation.
9. **Custom-Made Backplate:** Engines could be designed with a custom-made backplate that offers a mounting points as well as design tailored to your specific needs. This feature ensures that your engine fits seamlessly into your system, providing optimal performance and functionality.
10. **Electronic Fuel Injection:** Engines could be equipped with electronic fuel injection for improved efficiency and performance. This feature ensures that you get the most out of your engine, with increased fuel economy and power.
11. **Belt reduction gear:** Custom designed rediction gear can be installed onto the engine to better suit your needs.

DIMENSIONS







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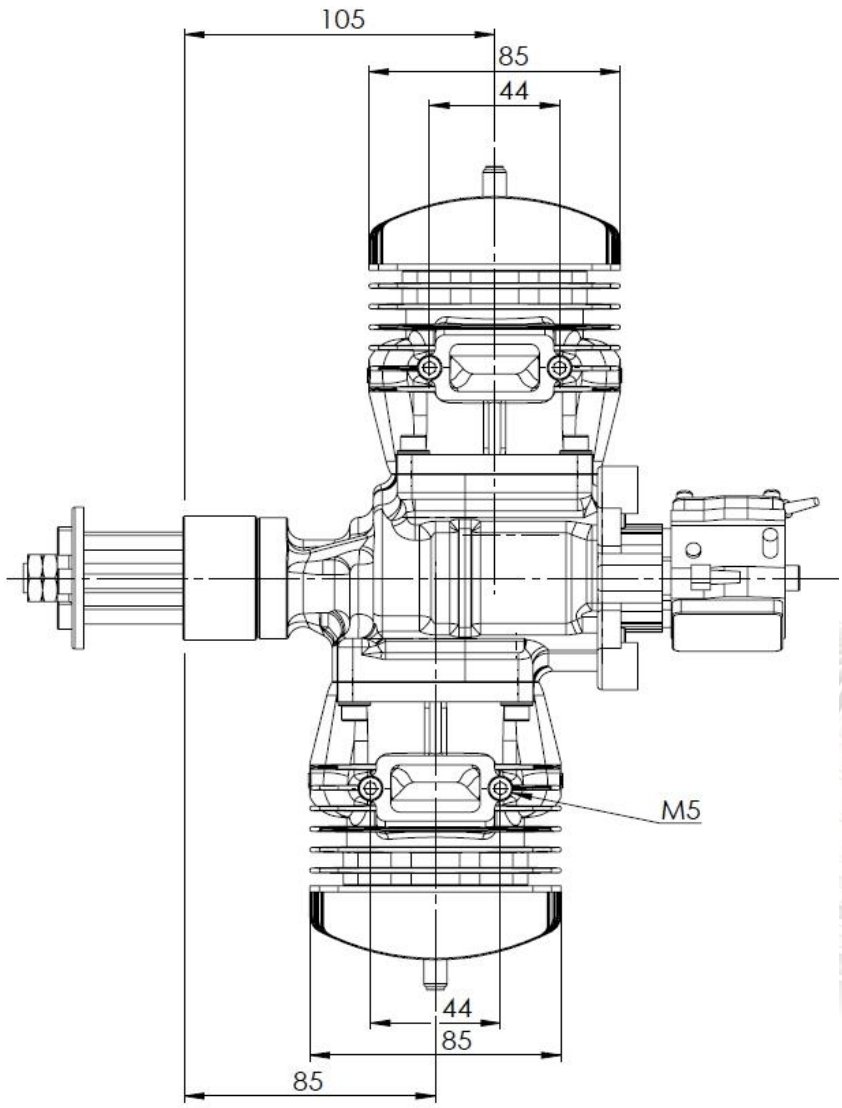

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Apendix A – Maintenance periods

Periodical maintenance operations for ADX 140

GENERAL TBO - 500hrs, Crankshaft 1000hrs

Do the operation in left column every :

Operation	25hr	50hr	100hrs	500hrs	1000hrs
Deep visual inspection	X				
Spark plug cleaning	X				
Spark plug electrodes gap controll	X				
Spark plug replacement		X			
Fuel filter replacement	X				
Fuel lines/throttle control check	X				
Piston and cylinders decarbonization		X			
Compression check		X			
Rotary valve check	X				
Rotary valve replacement			X		
Carburettor filter cleaning		X			
Starter and starter wheel check		X			
Starter and starter wheel replacement				X	
Wrist pin and piston rod bearings check		X			
Wrist pin and piston rod bearings replacement				X	
Spark plug cap replacement		X			
Generator rotor replacement (if installed)				X	
Stabilizer replacement				X	
Ignition unit replacement				X	
Crankshaft replacement					X
Bearings replacement				X	
Cylinder and piston replacement				X	

Table A -ADX maintenance schedule

General waranty period is 500hrs or 1 year* which one of terms is reached earlier.

Crankshaft has special warranty for 1000hrs or two years which one of terms is reached earlier. If part is properly controlled and replaced according to Table A and damaged before the replacement

It is considered warranty case and replaced by ADX. New replaced part has warranty period only 3 months
Parts for planned replacemeent have to be bouhgt from a supplier, they are not replaced unnder warranty.

**) where replacement is indicated in shorter period, replacement period also means warranty for that particular part.*

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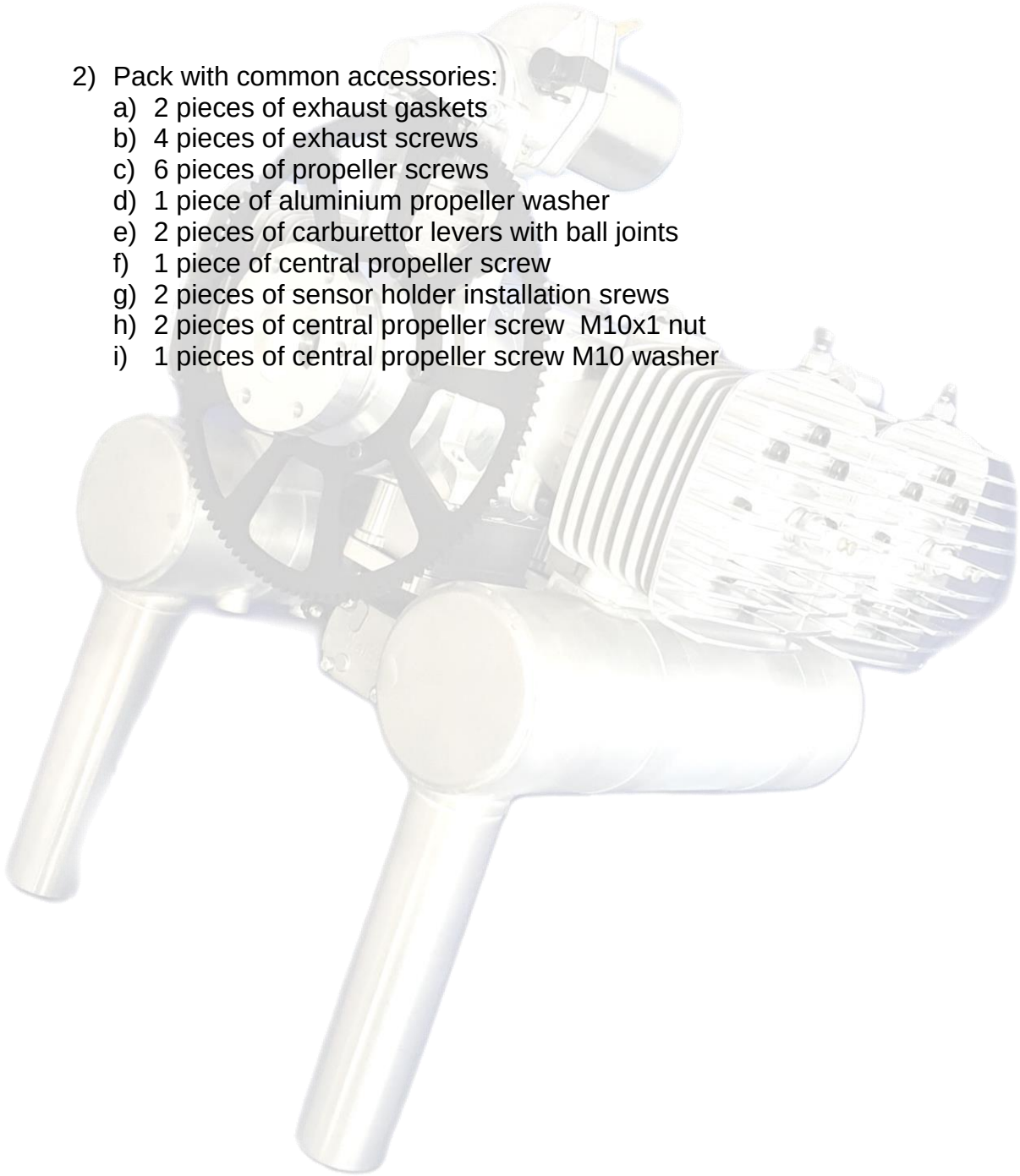
Apendix B – Engine package content

With engine we deliver:

1) Engine with spark plugs, carburettor, ignition boxes and sensors

2) Pack with common accessories:
   a) 2 pieces of exhaust gaskets
   b) 4 pieces of exhaust screws
   c) 6 pieces of propeller screws
   d) 1 piece of aluminium propeller washer
   e) 2 pieces of carburettor levers with ball joints
   f) 1 piece of central propeller screw
   g) 2 pieces of sensor holder installation srews
   h) 2 pieces of central propeller screw M10x1 nut
   i) 1 pieces of central propeller screw M10 washer



Apendix C

Tightenning torque and screw securing:

Whenever you disasemble the engine, screws holding cylinder or cylinder head **MUST** be replaced by new.

Position/ Engine type	**Size**	**Torque**	**Securing**
Heads 70/140/280	M4	6Nm	Loctite 270
Heads 250/195/500/390	M5	10Nm	Loctite 270
Cylinders ALL	M5	10Nm	Loctite 243
Backplate/crankcase 140	M4	5Nm	Loctite 243
Backplate crankcase 97/195	M5	7Nm	Loctite 243
Carburetor ALL	M5	6Nm	Loctite 243
Spark plug	M10x1	12Nm	NONE
Backplate nuts	M6	9Nm	Loctite 243/none
Central propeller bolt 97-195	M8	17,5Nm	NONE
Central propeller bolt 210-500	M10	35Nm	NONE

Sealants and glues used:

For sealing the most surfaces even when gaskets are used we recommend Locitie SI 5699 Grey sealant.

Glues are used to secure screws and bearings. For screws reffer to Tightenning torque and screw securing:

For the bearings when replaced we recommend to use Loctite 648