Engine 2R-i-1C27.

Operation recommendation.

1. Safety. Read before any operation with engine.

Engine 2R-i-1C27 (hereinafter the Engine) is not an aircraft engine and therefore it may have unexpected malfunctions. In case of such engine being installed into a vehicle, its malfunction may cause injury, death or property damage. These consequences may also be triggered by improper operation and maintenance as well as by failure to observe safety measures. The user must take into account all possible risks and take all the necessary precautions to avoid any undesired consequences. The user is liable for consequences of any malfunctions or for failure to observe safety measures.

The manufacturer in his private capacity has checked the Engine as a part of a microlight, which check has confirmed the operability of the Engine and its conformity to the established norms.

The manufacturer denies the fact that the Engine has been designed and is manufactured specifically for use as a part of an aircraft or any other vehicle.

The Engine has not undergone any transport certification, including aircraft certification, and the manufacturer disclaims any responsibility for exploitation of this equipment as a part of any vehicle, including aircrafts, if the exploitation is carried out with violation of the domestic legislation.

Due to continuous process of perfecting the product, the manufacturer reserves the right to introduce changes to the mechanism without changing the operation manual.

The present recommendation contains the description of exploitation of a certain kind of engine. The recommendation does not contain full information necessary for exploitation of the engine and is not a manual. For proper engine exploitation sufficient basic knowledge and skills are required.

Design features of the vehicle, where the Engine is installed, and conditions of service influence engine performance significantly. The manufacturer cannot predict all possible combinations of those features and conditions. Therefore the manufacturer is not able to give recommendations for each specific case. The responsibility for proper installation of the Engine and choice of specific exploitation parameters and procedures lies solely on the owner of the Engine.

All the information except that which is provided in writing and is officially stated, has no force or effect and is purely for reference.

2. Performance and description.

- **Power** Engine- about 25hp at 8000-8500rpm.
- **Reduction ratio**- 1:3,8. **Belt** 509PJ14.
- **Gasoline**- Regular or Premium automotive gasoline. Octane rating 92-98. Use maximum quality gasoline adjustable in your region.
- Use **oil** for high performance two stroke engine with air cooling. Mix into fuel not below 3% oil.
- **Spark plug** NGK BPMR7A or analog. Clearance between electrodes 0,6mm.
- **Engine stop** make circuit black wire to engine earth. Connection circuits separate blocks are not allowed. Circuit each unit must be earthed a separate pair of common ignition switch contacts.
- Normal **temperature** Engine- “under spark plug”- 150-220^{o}C. Maximal- 270^{o}C.
- By default, Engine delivery in **pusher** application.
- **Intake silencer** (airbox) must be mount on main vehicle frame not less than one stock rubber silent block.
- When install **extended starter rope set** It is necessary to increase the preload friction spring. For this you must unscrew central bolt inside manual starter (Left thread). Fixed pulley on place. Open round cup, pull out friction spring. Install until this special washer from set. Then reassemble everything back. Replace rope on extended.

3. Break in new engine.

For start operation new engine use fuel mix with 5% oil.

When assembling the engine may remain residual stresses. To remove then you must operate break in procedure. The essence of this procedure is to combine short periods (2-3 seconds) the load on the engine, with lengthy periods (2-3 minutes) work at low speed (approximately 3000ob/min) for cooling. Load on engine increase on 500rpm for each load cycle. After reaching the maximum throttle opening for several cycles bring the duration of the work engine at full throttle to 1 minute.

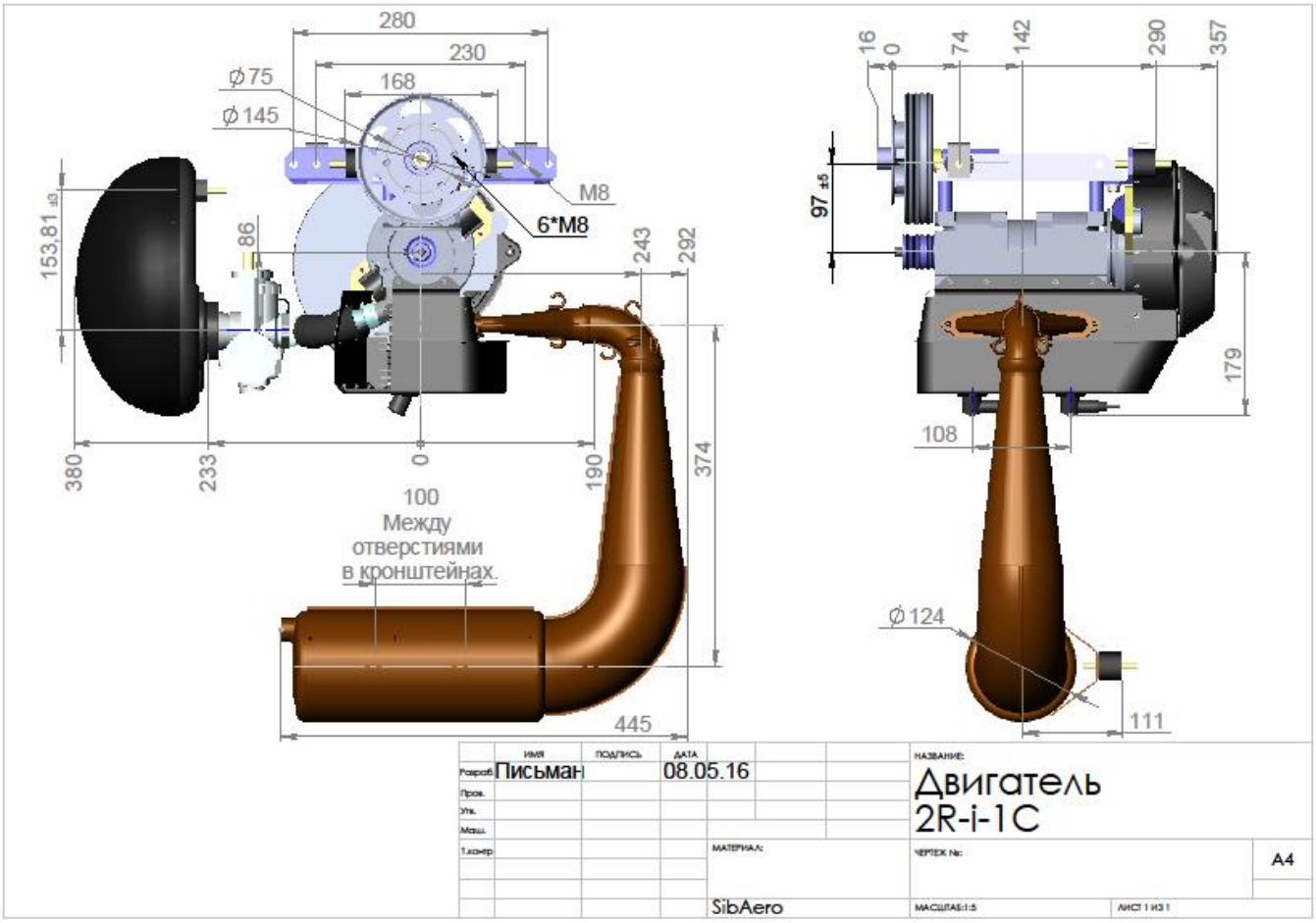
Execute carburetor tuning and adjust propeller pitch. For maximizing power, us rule, you need replace main jet on smaller. Jets not include in engine delivery set and buying separately.

After this procedure engine ready for usual load.

After same work hour with typical load retorque this bolts:

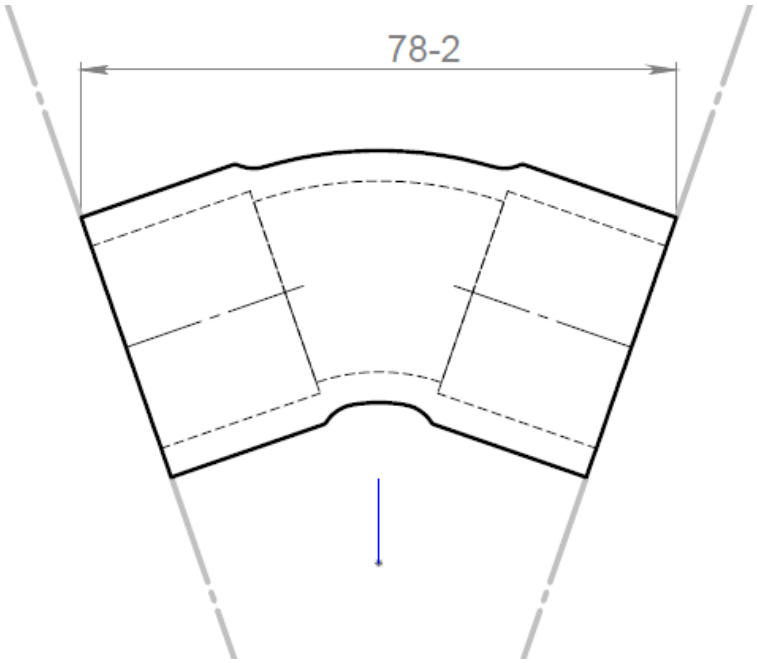
- Bolts M6 cylinder mount- throat hole in cowl- torque 10Nm- 8 pics.
- Bolts M6 exhaust collector mount- torque 10Nm- 4 pics.
- Bolts M8 reduction mount- torque 25Nm- 6pics.
- Bolt M10 driven reduction pulley mount- torque 80Nm.

4. Engine mount dimension.



5. Spare parts.

- In 2R-I engine use standard piston from chainsaw Husqwarna 3120XP.
- Manual starter- standard part from universal engine Honda GC-series.
- Rubber intake socket must replace for first signs of cracking them. You can make them yourself, use curved stretches of soft oil hoses. For cutting use this figure in 1:1 scale.



6. Limited warranty.

In case a clear manufacturing defect in an Engine is found within 12 months from its delivery date, the manufacturer will be obligated to replace or repair the damaged part as they see fit. The warranty covers only the defects which clearly appeared in the process of manufacturing the engine or could have appeared in that process. These include shallow weld, imperforation, lack of necessary parts and the like. The user has to pay for delivery of a new engine or parts for repairing or replacing the damaged engine. None of extemporaneous breakages of questionable source which could have been caused by design features of a vehicle or conditions of exploitation (which include wedging, burn through, cracks) are subject for warranty coverage.

7. Additional information.

For more information visit our site www.sibaero.ru