

Rotax Aircraft Engine

Torquing Specifications



Rotax 277 Main Torquing Specifications

<u>Bolt Type</u>	<u>Bolt size</u>	<u>Wrench Used</u>	<u>Nm</u>	<u>in lbs.</u>	<u>Ft. lbs.</u>	<u>Loctite</u>
Cylinder head nuts	8mm	13mm Socket	24	210	18	None
Crankcase Screws	8mm	13mm Socket	24	210	18	242
Magneto Housing Nut	18mm x 1.5	30mm Socket	80	700	58	242
Crankcase screws or nuts	10mm	16mm Socket	40	354	30	242
Exhaust socket screws	8mm	6mm Allen	24	210	18	None

Rotax 377 – 447 – 503 Main Torquing Specifications

<u>Bolt Type</u>	<u>Bolt size</u>	<u>Wrench used</u>	<u>Nm</u>	<u>in lbs.</u>	<u>Ft. lbs.</u>	<u>Loctite</u>
Crankcase screws	8mm	6mm Allen	22	195	16	242
Crankcase screws	6mm	5mm Allen	10	90	6	222
Crankcase screws and nuts	10mm	18mm Socket	38	335	28	242
Crankcase studs	10mm		10	90	8	242
Cylinder studs	8mm		7	60	5	242
Cylinder head nuts	8mm	13mm Socket	22	195	16	None
Allen screws on stator plate	5mm	5mm Allen	6	55	5	222
Fan housing allen screws	6mm	5.5 allen	10	90	8	222
Fan nut	16mm x 1.5	22mm Socket	60	530	44	242
Magneto housing	22mm x 1.5	30mm Socket	90	800	67	242
Allen screws for starting pulley	8mm	8mm Allen	22	195	16	242
Hex screws for rewind starter	6mm	10mm Socket	10	90	8	None
Hex screws for cylinder cowling	8mm	13mm Socket	15	135	11	None
Intake manifold screws	8mm	13mm Socket	22	195	16	242
Intake manifold screws	6mm	10mm Socket	10	90	8	222
Intake rubber flange screws	8mm	13mm Socket	14	125	10	None
Spark Plugs (cold engine)	14mm	13/16 Socket	27	240	20	Anti-Seize
Hex screws for starter gear	8mm	13mm Socket	22	195	16	242
Lock nuts for electric starter	8mm	13mm Socket	22	195	16	242
Taptite screws for ignition coil	6mm	8mm Socket	6	55	5	222
Allen screws for adaptor	10mm	8mm allen	40	355	30	222
Studs for gear box	8mm		8	70	6	242
Hex screw for drive gear	1/2-20 UNF	3/4 Socket	60	530	44	242

Rotax 503 Ducati Dual Ignition Main Torquing Specifications

<u>Bolt Type</u>	<u>Bolt Size</u>	<u>Wrench Used</u>	<u>Nm</u>	<u>in lbs.</u>	<u>Ft. lbs.</u>	<u>Loctite</u>
Crankcase Screws	8mm	6mm Allen	22	195	16	242
Crankcase base nuts	10mm	18mm Socket	38	335	28	242
Crankcase base studs	10mm		12	105	9	242
Cylinder studs	8mm		7	60	5	242
Cylinder head nuts	8mm	13mm Socket	22	195	16	None
Allen Screws for stator plate	5mm	5mm Allen	7	60	5	222
Taptite screws for pickup	5mm	8mm socket	6	55	5	None
Magneto housing nut	22mm x 1.5	30mm Socket	90	800	67	242
Fan housing allen screws	6mm	5.5mm Allen	10	90	8	222
Fan nut	16mm x 1.5	22mm Socket	60	530	44	242
Allen screws for starting pulley	8mm	8mm Allen	22	195	16	242
Hex Screws for rewind starter	6mm	10mm Socket	10	90	8	None
Hex Screws for cylinder cowling	8mm	13mm Socket	14	125	10	None
Intake manifold screws	8mm	13mm Socket	22	195	16	242
Intake manifold screws	6mm	10mm Socket	10	90	8	222
Spark Plugs (cold engine)	14mm	13/16" Socket	27	240	20	Anti-Seize
Hex screw for ignition coil plate	6mm	10mm Socket	5	45	4	222
Locknuts for electronic box	6mm	10mm Socket	8	70	6	222
Hex screws for starter gear	8mm	13mm Socket	22	195	16	242
Lock nuts for electric starter	8mm	13mm Socket	22	195	16	None
Hex screw for drive gear	1/2-20 UNF	3/4" Socket	60	530	44	242
Stud for gear box	8mm		8	70	6	24
Hex nuts/screws for gearbox	8mm	13mm Socket	24	210	18	None