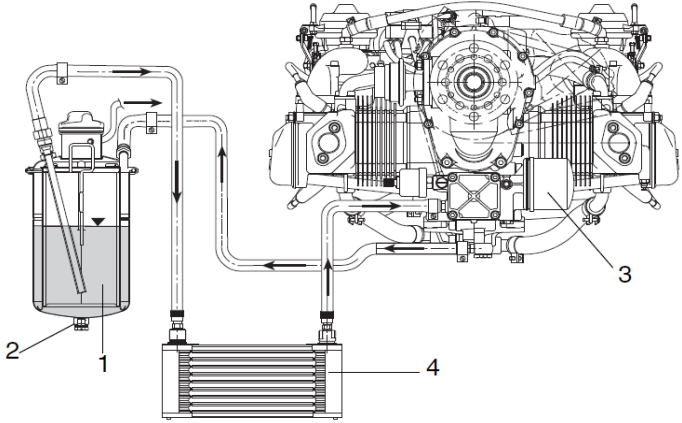



INITIAL OIL INSTALLATION PROCEDURE

DATE: _____ SERIAL NUMBER: _____ TECH: _____

Note: At the time of this publication, the Rotax Installation & Maintenance Manuals recommend the first oil change at 25 hours and every 100 hours thereafter - unless using AvGas/100LL, then every 50 hours.

Note: The instruments, equipment and/or configuration in this procedure may differ from that of your aircraft. Consult the Rotax Installation or Maintenance Manual or call Wild Sky for help.

Done	Step	Instruction	Image
	<p>1</p>	<p>Refer to the Rotax 912 Oil Installation manual.</p> <p>Verify that Oil Lines are routed correctly. Confirm the Oil Reservoir & all Connections are properly connected & tight. Verify that Oil Cooler is installed in the Suction Line between the Oil Reservoir and the Oil Pump inlet.</p> <p>NOTE: Disregard the Pressure Line in this diagram unless working on a 914 Turbo Engine.</p>	 <p>The diagram illustrates the oil system components and their connections. It shows an oil reservoir (2) connected to an oil pump (1). The pump is connected to an oil cooler (4), which is then connected to the engine (3). Arrows indicate the flow of oil from the reservoir through the pump and cooler to the engine.</p>
	<p>2</p>	<p>Secure connections by slightly loosening nuts using wrench, then tighten to manufacturer specifications (refer to Rotax Installation Manual) to verify proper connection.</p>	 <p>A close-up photograph showing a person's hands using a wrench to tighten a nut on the engine's oil system. The wrench is positioned on the nut, and the person is applying force to tighten it. The engine's oil system components are visible in the background.</p>

3 Remove & clean the Oil Reservoir Cap & Dipstick, then put them in the Font Seat – or somewhere that guarantees their re-installation.

Do NOT just set them on a flat spot anywhere on the aircraft...

Verify Oil Reservoir quick drain is properly CLOSED.



4 The entire Oil system is approximately 3 Liters or 3 Quarts but note that a liter is 34oz and a Quart is only 32oz.


Use of a flexible funnel to fill Reservoir is highly suggested.


Review Rotax 912 Oil Installation Manual for recommended Oil Brands & current versions.





5 Dipstick is located under cap in Oil Reservoir. Verify that the Oil Reservoir is filled up to the maximum level (To the top of the flat portion of the Dipstick).





	<p>6 Additional oil, up to .5 liters may be added to the Oil Reservoir for this procedure.</p> <p>Use of a flexible funnel to fill Reservoir is highly suggested.</p> <p>See Rotax Manual for approximate capacities.</p>	
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	<p>7 Disconnect Oil Return Line marked "IN" at the Reservoir Connection.</p>	
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	<p>8 Verify Wires and Hoses are clear.</p>	
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	9	Place the free end of the Oil Return Line into a suitable container below the engine. We typically attach a Ziplock Bag via a Zip Tie to the end of the Oil Return Line, so we can see Oil arrive in the bag.	
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	10	Place temporary air tight plug on the Oil Reservoir fitting marked "IN". We typically use a Fragola or Aerquip Fitting with a Plug. Use Wrench to tighten.	
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	11	Remove all Spark Plug Boots from the Spark Plugs. Be sure to Label where each corresponding Wire goes for proper re-assembling.	
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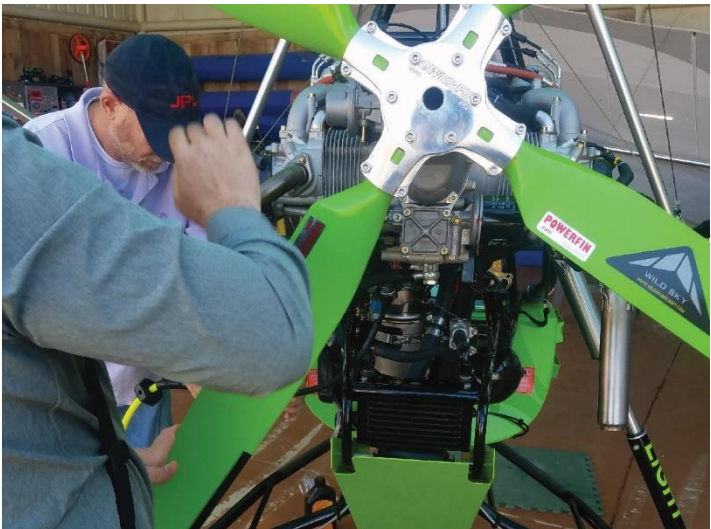
	12	Clean area and Remove Bottom Spark Plug from each Cylinder.	
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	13	Verify area around plug is clear of debris after removing Spark Plug.	
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	14	Verify all Magnetos are in the "OFF" Position.	
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	<p>15 Turn Master "ON". This allows power to view the Oil Pressure Gauge.</p> <p>STEPS (15-21) are done simultaneous.</p>	
	<p>16 Before attaching air supply to the Oil Breather Line, adjust your Air Compressor Outlet Regulator so that air line pressure is 10-15 PSI.</p> <p>**Do Not Exceed 15 PSI**</p>	
	<p>17 Verify Oil Reservoir Cap is re-attached before pressurization.</p>	

	<p>18 Use an appropriate Air Delivery Nozzle or Schrader Air Fitting. Place Air Nozzle into the end of the Oil Reservoir Breather Line. Begin to Pressurize.</p> <p>**Caution: It is Possible to empty the Oil Reservoir during this operation and as a result introduce more air into the Oil System. Pay attention to the Oil Level and fill Oil Reservoir as required during purging operation. **</p>	
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	<p>19 Turn the Prop/Engine in direction of normal rotation. There should be no compression/ resistance from the engine due to one spark plug being removed from each cylinder. Normally, this operation will take approximately 20 to 60 turns.</p>	
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	<p>20 During Pressurization and Normal Rotation of Propeller. You want to read the Oil Pressure Gauge at somewhere between 30-40 PSI.</p> <p><i>You may hear slight air coming out of the Oil Reservoir Cap.</i></p>	
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	<p>21 Continue Pressurization of lines and Normal Rotation of Propeller until first Oil drips into bag while also showing pressure indication on Oil Pressure Gauge.</p>	
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	<p>22 Once Adequate Oil Pressure is confirmed, release the Air pressure from Oil Reservoir. Turn Master "OFF".</p>	
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	<p>23 Remove Oil Reservoir Cap. Confirm Oil Level on Dipstick.</p>	
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	<p>24 Remove Temporary Cap from Oil Reservoir fitting marked "IN".</p>	 A close-up photograph of the oil reservoir fitting on an engine. A black hose is connected to the fitting. A temporary cap, which is a metal fitting with a conical top, is being removed from the fitting. The fitting is marked "IN".
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	<p>25 Reconnect the Engine Return Oil Line to the Oil Return Port on Reservoir marked "IN".</p>	 A close-up photograph showing a hand reconnecting the engine return oil line to the oil return port on the reservoir. The hand is holding the black hose and pushing it onto the fitting. The fitting is marked "IN".
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	<p>26 Tighten Oil Return Line using a wrench to engine manufacturer specs. See Rotax Installation Manual.</p> <p>Reroute & secure Vent Line if disturbed during this process.</p>	 A close-up photograph showing a wrench being used to tighten the oil return line fitting. The wrench is applied to the nut on the fitting. The fitting is marked "IN".
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	<p>27 Replace Spark Plugs to “finger-tight.”</p> <p>Remember to use proper Thread Coating to Engine Specification.</p>	
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	<p>28 Assuming this is a Rotax 912-series engine, torque Spark Plugs to 177 in/lbs (Confirm with Rotax Engine Installation Manual).</p> <p>Keep Spark Plug Wires Removed.</p>	
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	<p>29 Keep Spark Plug Wires Removed.</p>	
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	30	Remove Oil Reservoir Cap.	
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	31	Residual Oil will have accumulated in the Crankcase. Return it to the Oil Reservoir by turning the Propeller in the direction of Proper Rotation until the Oil Reservoir “BURPS”.	
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	32	Check Oil Quantity Level on Dipstick.	
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	<p>33 Add additional Oil to Oil Reservoir as needed.</p> <p>We recommend using a flexible funnel during this operation.</p>	
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	<p>34 Re-Check the Dipstick to confirm that the Oil Level is up to the full mark (See Rotax Installation Manual) at the top of the flat section of the Dipstick.</p>	
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	<p>35 Once Completed tighten Oil Reservoir Cap.</p>	
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	<p>36 Re-Attach Spark Plug Wires to Corresponding Cylinders.</p> <p>Replace any routing stand-offs & check entire engine for loose items, parts & tools.</p> <p>Make sure engine is clean.</p>	
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<p><u>Date:</u></p>	<p><u>Owner/Technician:</u></p>
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