



Revision: 04/2015

### Before Starting

Tailrotor Pedals	Adjust and secure
Seatbelts & Shoulderharness	Check
Glovebox door	Closed
Center console	Clear
Control friction locks	Release
Controls, freedom of movement	Check
Collective	Down & frict. On
Cyclic centered	Check & friction
Pedals	Neutral
Altimeter	Set Field Elevation
All switches/ circuit breakers	Off
Throttle	Closed
Mixture	Idle cutoff (pull)
Battery / Beacon Switch	On
Fuel quantity	Check
Low Voltage light	Press to test
Low Fuel light	Off (press to test)
XMSM Warn. Light	On
T/R Chip Light	Off (press to test)
Low RPM Warning Light	On
Low RPM Warning Horn	Test
Clutch control switch	Rel. guard open
Clutch warning light	On
Clutch auto engage switch	As Needed

### Starting Engine

*CAUTION: for normal operations do not open throttle; an overspeed can result from even a partially open throttle!*

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*CAUTION: do not exceed 1600 rpm with rotor disengaged; structural damage may occur to lower coupling shaft*

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*CAUTION: shut down engine if minimum oil pressure is not reached within 30 seconds after engine starts*

Mixture knob	Idle cutoff (pull)
Fuel valve	Push open
Throttle	Close, open 1/2"
Fuel pump	On
Fuel pressure	Check
Mixture Full Rich then close	For 3 sec.
Fuel pump	Off
Magneto switch	Both
Beacon	On
Visually & verbally clear Aircraft	Clear
Throttle	Closed
Starter	Engage
When engine starts push mixture in	Starter disengage
Stabilize engine at 1400 RPM	Check
Observe Oil Press. min.:	Within 30 Sec.
Alternator switch	On
Observe low voltage light out and ammeter charging	Start timer / radio on

### Rotor Engagement

*CAUTION: Damage to the helicopter can result if the collective stick is allowed to rise – the collective stick must be restrained in the full down position*

*CAUTION: Never apply power until the clutch release light is out, malfunctions are indicated if engine and rotor rpm indicator needles are not superimposed when engine is driving the rotor*

Visually clear Aircraft	Clear
Engine speed	1500 rpm
<b>In one motion</b> Set clutch switch to ENGAGE pos (full up). – then set to HOLD/ AUTO ENGAGE Pos (middle). – check if "auto engage light" is ON	
When engine and rotor rpm superimpose and light is out; flip switch up and close guard.	

<b>Engine ground checks</b>	
Set engine speed	2000 rpm / then set radio
All warning and caution lights	Out
Engine oil temperature	Within the green
Engine oil pressure	Within the green
Raise Collective and hold	15 inch MP @ 2000 rpm
Magneto check	Max. drop 125 rpm in 5 sec
Collective	Full down, friction on
Throttle	Close (check for needle separation)
Vne	Check
Warning and caution lights	Out
Fuel quantity	Sufficient
Cylinder head temperature	Green arc
Fuel pressure	Green arc
Engine oil temperature/pressure	Green arc
All switches/ circuit breakers	Check
Fuel valve	Open (push)
MAGNETO on both	Check
Clutch light	Out
Clutch switch	Guard closed
Mixture	Full rich ( IN)
Cyclic friction	Release
Cyclic trim	Adjust / center
Observe tip path plane	
Fuel Pump	On
<b>Before Takeoff</b>	
Warning & caution lights	Out
Collective Friction / <b>after clearance</b>	Release
Engine rpm	2700 rpm
Fuel quantity	Sufficient
Engine gauges	Green arc
<b>Before Landing</b>	
Landing area	Clear
Warning & caution lights	Out
Fuel Boost	On
Engine RPM	2700 rpm
Fuel quantity	Sufficient
Engine gages	Green arc
Landing light	On
<b>After Landing</b>	
Collective	Down & friction on
Throttle	Friction as desired
Start timer	<b>Note:</b> Idle / Mixture check, last flight of the day
Radio	Off
Landing light	Off
Fuel Boost	Off
Transponder	Off
<b>Engine shutdown</b>	
Engine RPM	2500 rpm for 2 minutes
Engine RPM 2000 rpm until CHT stable below 300°F or 5 minutes – whichever occurs first but never less than 1 min.	
Cyclic Centered	Trim / Friction On
Throttle	Close
Clutch switch	Release
Mixture	Idle Cutoff (pull)
Magnetos	Off after engine stops
Alternator switch	Off
After rotor stops:	
Beacon & navigation lights	Off
Battery switch	Off
<b>After shutdown inspection</b>	
Doors & Vents	Closed
Tie downs	On
Aircraft check	Leaks, Crossbeams, Struts, Skids, Squawks if any

Squawks	note
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