

## Maintenance plan MAG 33.3T/TI3xx 49.4T/TI2xx 74.6T/TI2xx 84.6T/TI2xx 13.6T/TI1xx

### Natural gas / Biogas

	After start up and Rev.	after	After start up and Rev.	after	after	at	at	at
Interval after operating hours at 1500 1/min	50	k.A.	1.500	2.000	4.000	16.000	32.000	64.000
Interval after operating hours at 1800 1/min	50	k.A.	900	1250	2.500	10.000	20.000	40.000
Maintenance interval	C1	O1*)	W1	W2	W3	I1**)	I2**)	I3**)
Change engine oil Oil analysis *)	x	x						
Change engine oil filter *)	x	x						
Check hoses	x		x	x				
Check for leaks	x		x	x				
Check coolant pressure			x	x				
Check screw connections	x		x	x	x			
Record operating data	x		x	x				
Check starting sequence	x		x	x				
Check intake vacuum			x	x				
Check valve clearance, adjust if necessary			x	x				
Check spark plugs, change if necessary					x			
Adjust/check throttle valve	x				x			
Clean/ check gas filter	x				x			
Clean/ check air filter	x				x			
Clean/ check pulse pick-up	x				x			
Check coolant concentration	x				x			
Check ignition timing	x				x			
Measure crankcase pressure	x				x			
Measure exhaust back pressure including catalyist	x				x			
Check emissions and lambda	x				x			
Check exhaust system for external contamination	x				x			
Check compression pressure					x			
Check/ change oil separator					x			
Check/ calibrate sensors					x			
Check/ renew exhaust gas turbocharger						x		
Clean mixture cooler						x		
Renew coolant***							x	
Measure crankshaft axial clearance							x	
Check/ renew cylinder heads							x	
Check/ renew liners							x	
Check/ renew connecting rods							x	
Check/ renew connecting rod bearings							x	
Renew piston rings							x	
Check/ renew pistons							x	
Complete engine overhaul								x

\*) The engine oil change intervals must be determined on the basis of regular oil analyses depending on the operating conditions and the engine oil used and in strict compliance with the limit values for used oil from MAMotec GmbH.

\*\*\*) For repairs I1, I2, the intervals are forecast and non-binding, taking into account the minimum requirements in each case to the gas quality for MAMotec industrial gas engines and operation of the engines in accordance with TA-Luft exhaust gas

\*\*\*) The coolant must be replaced after 4.5 years at the latest, regardless of the engine's service life!