



GENERATOR SOLUTIONS NATURAL GAS / PROPANE GMC - CHEVROLET - FORD



GOVERNORS AMERICA CORP.

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<https://www.governors-america.com>

ABOUT THIS SOLUTIONS GUIDE

This book details the solutions for natural gas or propane Ford and GMC-CHEVROLET engines running on a stable platform.

GAC offers simple control mechanisms like the 225 series which provides basic control and an external shut off lever, throttle body solutions combined with your engines carburetor, and advanced gaseous-fueled engine management systems with exhaust emissions control to meet worldwide standards. The basic Fuel and Ignition Management System (FIMS) is for low-pressure applications using a venturi mixer and stepper motor control valve.



THESE SOLUTIONS ARE NOT INTENDED FOR USE ON-ROAD VEHICLES.

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FORD 4.9L / 300 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

Specifications for a complete Electronic Governor system for a natural gas or propane Ford 300 cu in (4.9 L) engine using an externally mounted GAC 225 series actuator.



[Installation Instructions](#) are available at GACs website.

NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS -12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M BK267 BK222	Installation kit for 4-barrel intake Optional pedestal mount bracket Optional bracket mount
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8m] Shielded Cable / Flying Leads / Stainless
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

INSTALLATION KIT KT122M



SPEED CONTROLLERS



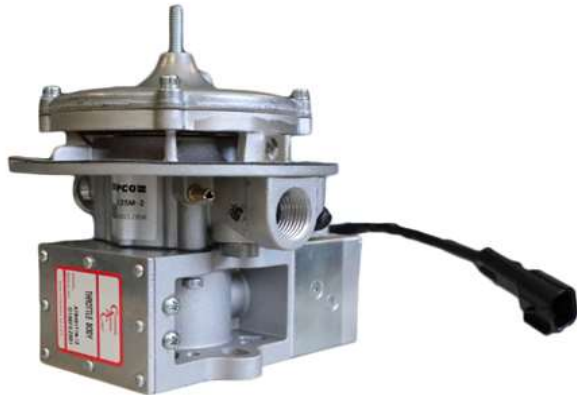
GAC 225GS SERIES ACTUATOR



FORD 4.9L / 300 ENGINE

ATB INTEGRATED ACTUATOR

Specifications for a Electronic Governor system for a natural gas or propane Ford 300 cu in (4.9 L) engine 6-cylinder engine with a 125 IMPCO Carburetor using a GAC Throttle Body.



IMPCO 125 GAS MIXER



SPEED CONTROLLERS



ATB SERIES ACTUATOR



[Installation instructions](#) are available on the GAC website.

NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB401T1N-12/24 , EC1300	40 mm 200 F° integrated actuator throttle body Connector
Mixer	MX125M-2	IMPCO 125 gas carburetor mixer
Magnetic Pickup	MSP6729 ,	2.7 in. [69mm] Thread Length / 6 ft. [1.8m] Shielded Cable / Flying Leads / Stainless and connector
Speed Controllers	ESD5526	Analog multi V DC Standard unit up to 7.5 kHz – Smoke limiting
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	EEG6500	Digital Multi-V DC / Built-In Display / Variable Speed Input up to 12 kHz

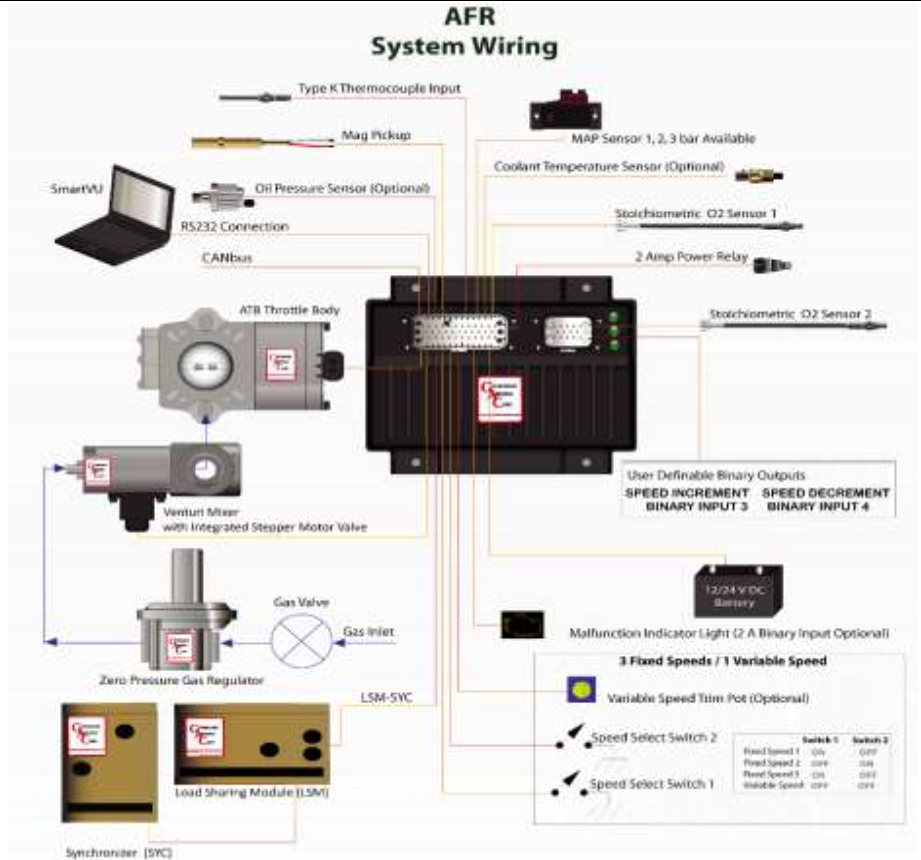
FORD 4.9L / 300 ENGINE




AIR-FUEL RATIO CONTROL

Specifications for a complete electronic fuel control governing system for a natural gas or propane Ford 300 cu in (4.9 L) engine using the AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



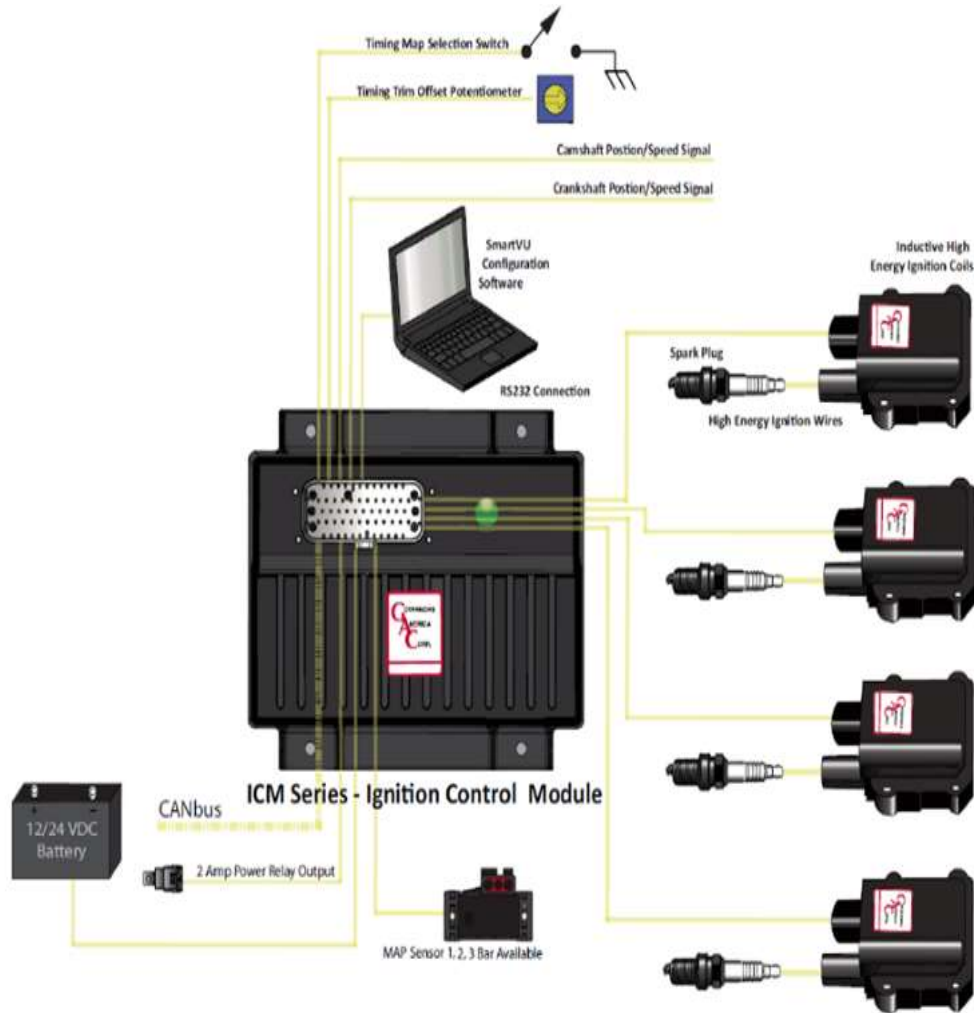
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
		
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB401T1N-12/24, CH1215	40 mm 200 F° integrated actuator throttle body
Speed Controller	AFR210, CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB39-STM, VFC106	Small bore, 3/4 in NPT fitting ATB T1, Impco control valve
AFR MAP Load Sensor	SPM200-1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02-1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101-12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507, EC1509, EC1506, EC1505, EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

FORD 4.9L / 300 ENGINE

ICM IGNITION CONTROL MODULE

This is a complete ignition control system for a natural gas or propane Ford 300 cu in (4.9 L) 6-cylinder engine using the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-6 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-6 , CH1215	ICM 6 cylinder sequential, 16 cylinder wasted-spark, mating connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602 , EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder Assembly
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication

FORD 7.5L /460 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

Specifications for a complete Electronic Governor system for a natural gas or propane Ford 460 cu in (7.5 L) engine using an externally mounted GAC 225 series actuator.

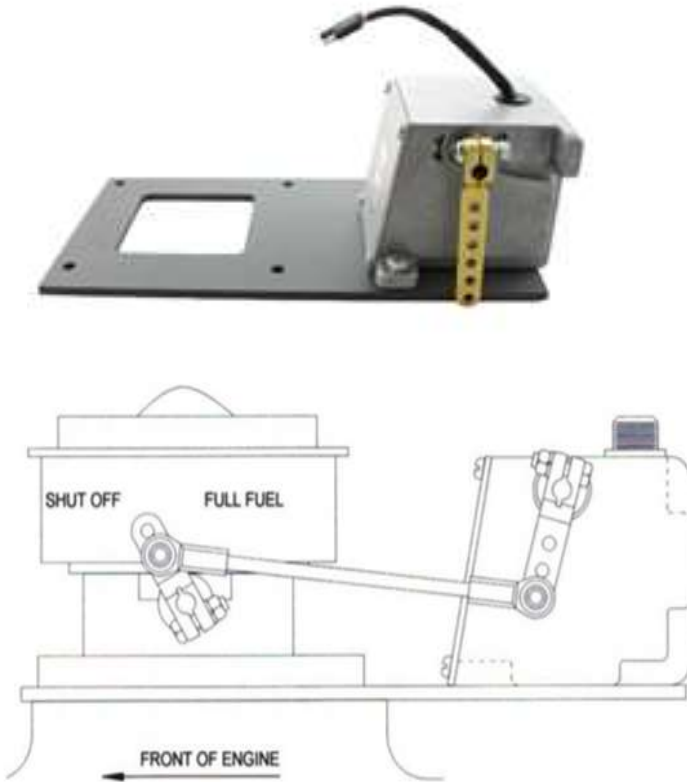
INSTALLATION KIT KT122M



SPEED CONTROLLERS



GAC 225GS SERIES ACTUATOR



[Installation Instructions](#) are available at [GACs website](#).

NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS-12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8m] Shielded Cable / Flying Leads / Stainless
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

FORD 7.5L /460 ENGINE

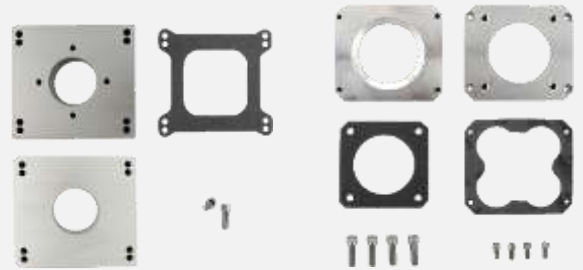
ATB INTEGRATED ACTUATOR

An electronic governor system for a natural gas or propane Ford 460 cu in (7.5 L) V-8 engine with a customer supplied 425 IMPCO Carburetor uses a GAC Throttle Body.



[Installation instructions](#) are available on the GAC website.

INSTALLATION KITS KT41761 and KT425



SPEED CONTROLLERS



ATB SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N -12, 24	55 mm 200 F integrated actuator throttle body
Installation Kit	KT41761 KT425	Installation kit for 4-barrel intake Adapter to 425 Impco to throttle body
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] Shielded Cable
Potentiometer	TP501	Optional 5K potentiometer
Speed Controllers	ESD5526E	Analog Multi-V DC / Standard Unit up to 7.5 kHz, Smoke limiting
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

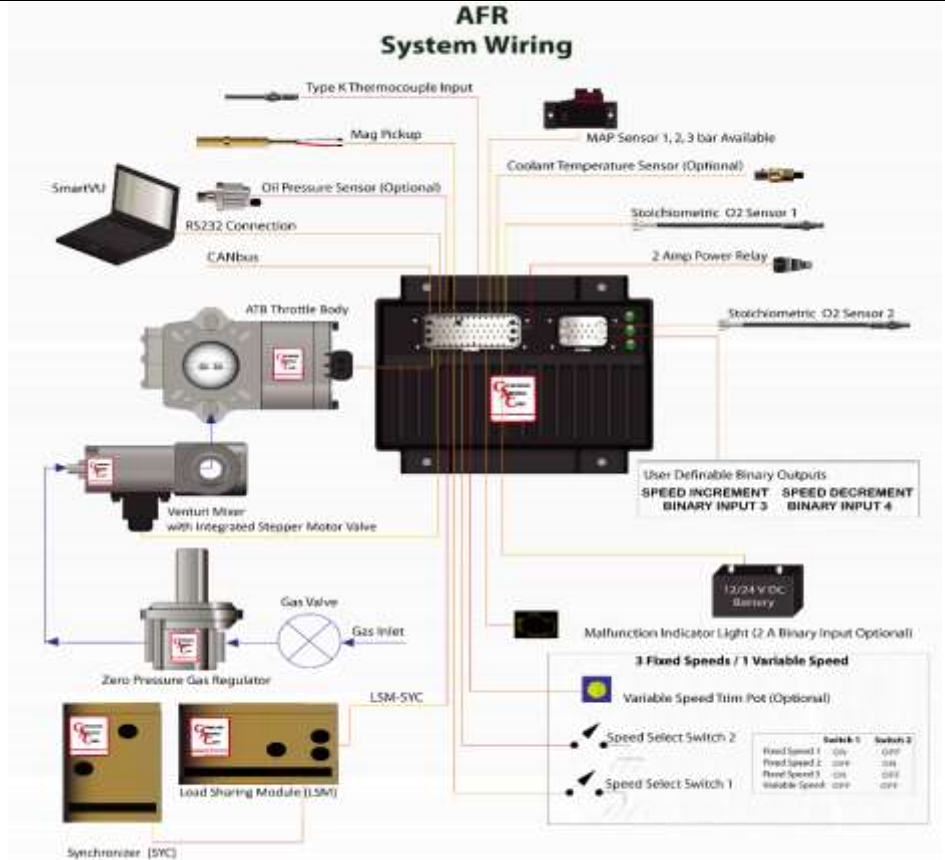
FORD 7.5L /460 ENGINE




AIR-FUEL RATIO CONTROL

This complete electronic governor system for a natural gas or propane Ford 460 cu in (7.5 L) V-8 engine with a customer supplied 425 IMPCO Carburetor uses the GAC AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



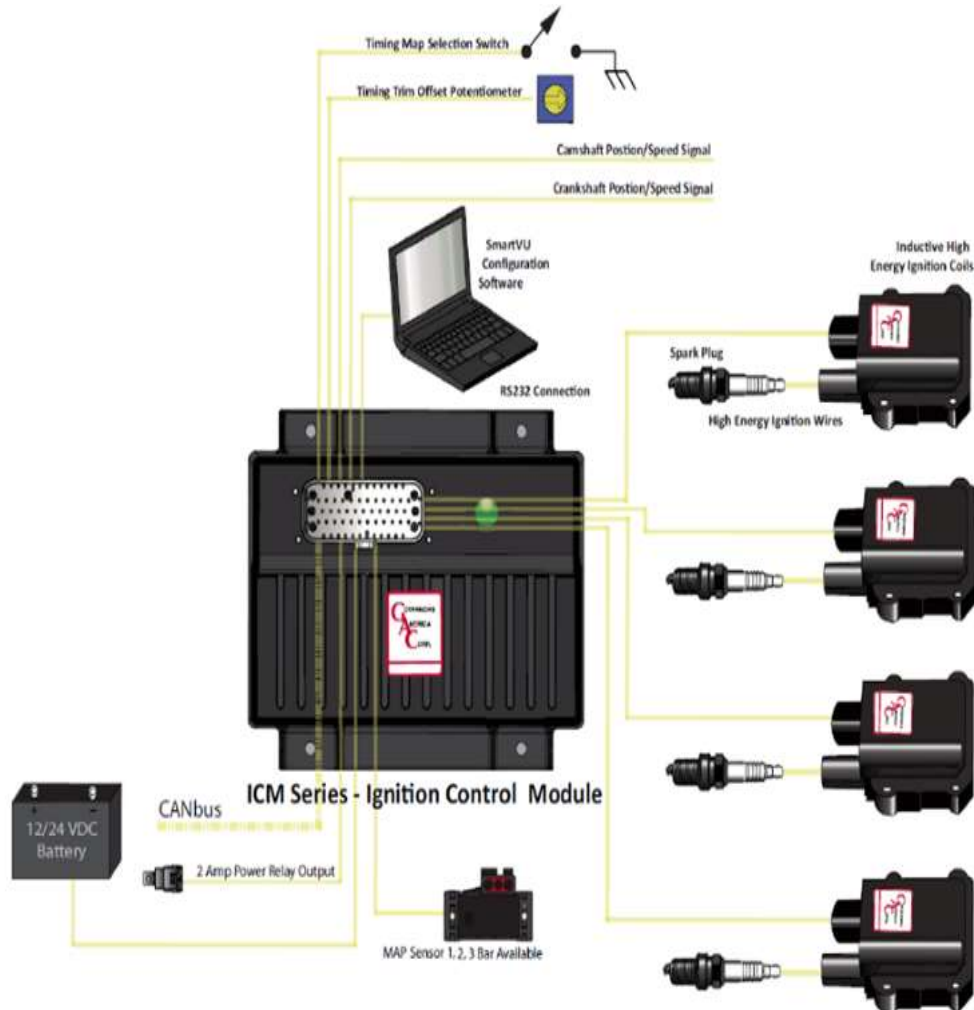
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
		
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N -12/24, CH1215	55 mm 200 F° integrated actuator throttle body
Speed Controller	AFR210 , CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB42 -STM, VFC106	Small bore, 3/4 in NPT fitting ATB T2, Impco control valve
AFR MAP Load Sensor	SPM200 -1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02 -1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101 -12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507 , EC1509 , EC1506 , EC1505 , EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

FORD 7.5L / 460 ENGINE

ICM IGNITION CONTROL MODULE

A complete ignition control system for a natural gas or propane Ford 460 cu in (7.5 L) 8-cylinder engine uses the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-6 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



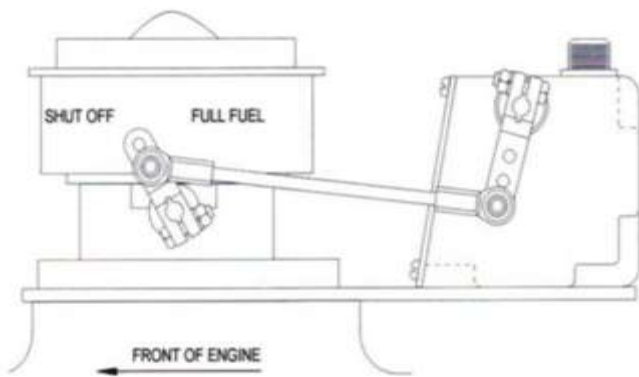
NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-8 , CH1215	ICM 8 cylinder sequential, 16 cylinder wasted-spark, mating connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602 , EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder Assembly
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication

GMC – CHEVROLET 5.0L / 305 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

A complete Electronic Governor system for a natural gas or propane GM - Chevy 5.0L 305 cu. in. engine 8-cylinder engine using an externally mounted 225 series actuator.



INSTALLATION KIT KT121M



SPEED CONTROLLERS



GAC 225GS SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS -12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] Shielded Cable / Flying Leads / Stainless
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

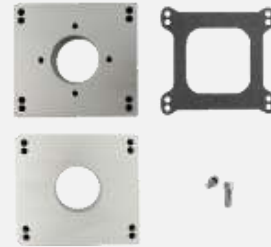
GMC – CHEVROLET 5.0L / 305 ENGINE

ATB INTEGRATED ACTUATOR

Electronic Governor system for a natural gas or propane GM – Chevy 5.0L 305 cu. in. engine using a GAC Throttle Body with customer supplied 225 IMPCO Carburetor.



INSTALLATION KITS KT41761



SPEED CONTROLLERS



ATB SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB452T2N-12, 24	45 mm 200° F integrated actuator throttle body
Installation Kit	KT41761	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] Shielded Cable
Speed Controllers	ESD5526E	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input to 12 kHz

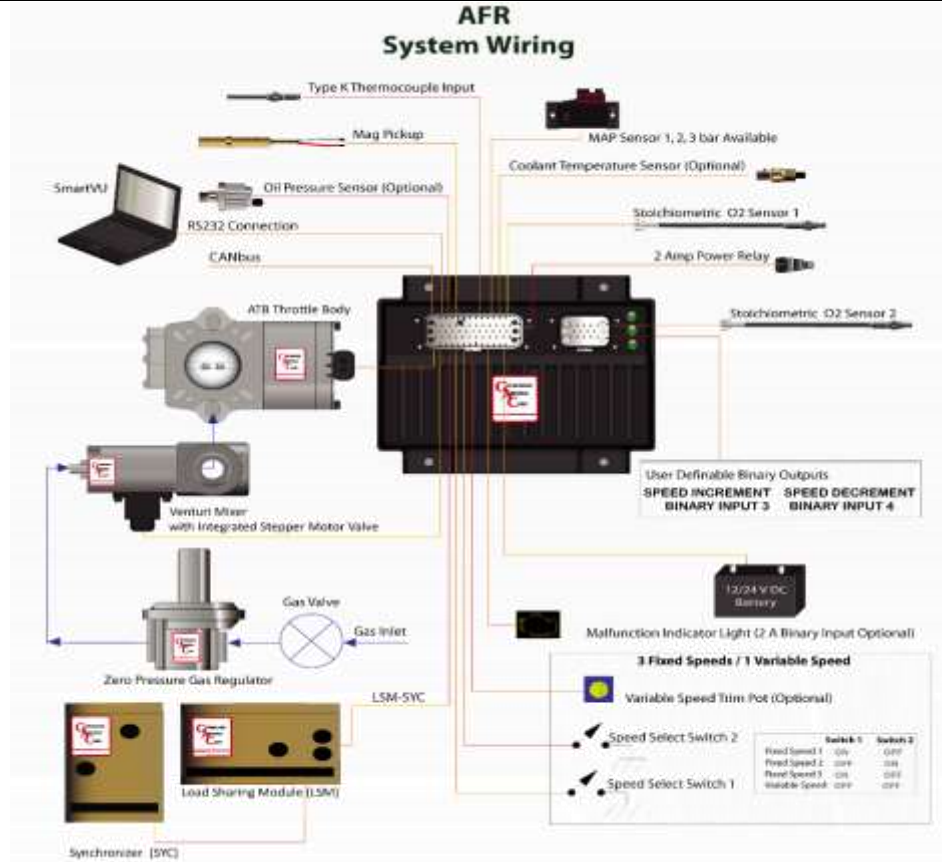
GMC – CHEVROLET 5.0L / 305 ENGINE




AIR-FUEL RATIO CONTROL

This complete electronic governor system for a natural gas or propane GM – Chevy 5.0L 305 cu. in. engine uses the GAC AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



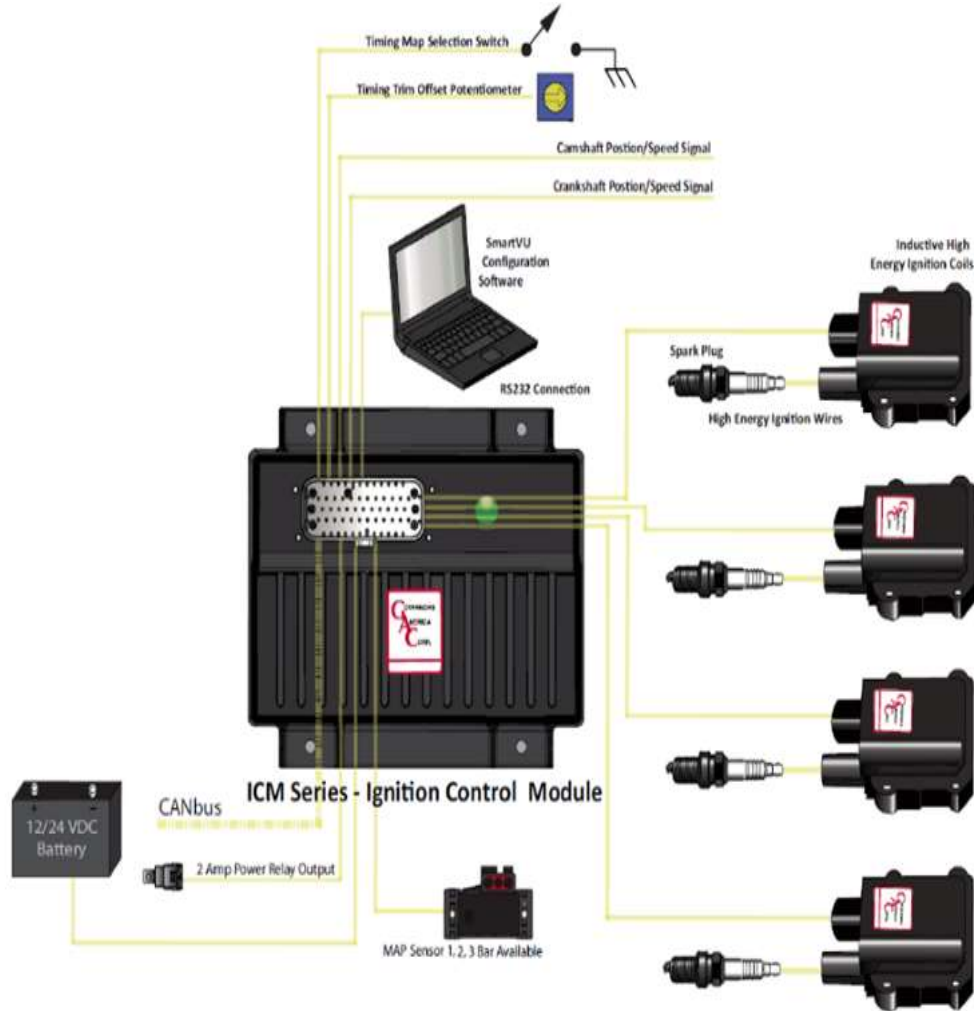
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
		
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB452T2N-12/24, CH1215	45 mm 200° F integrated actuator throttle body
Speed Controller	AFR210, CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB42-STM, VFC106	Small bore, 3/4 in NPT fitting ATB T2, Impco control valve
AFR MAP Load Sensor	SPM200-1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02-1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101-12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507, EC1509, EC1506, EC1505, EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

GMC – CHEVROLET 5.0L / 305 ENGINE

ICM IGNITION CONTROL MODULE

This is a complete ignition control system for a natural gas or propane GM -Chevy 5.0L 305 cu. in. 8-cylinder engine using the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-8 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



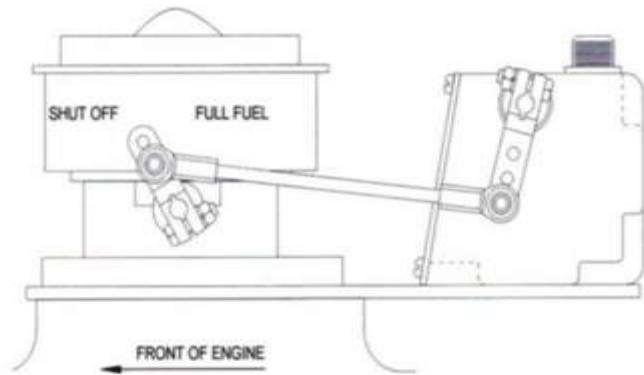
NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-8 , CH1215	ICM 8 cylinder sequential, 16 cylinder wasted-spark, mating connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602 , EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder Assembly
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication

GMC – CHEVROLET 5.7 L / 350 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

A complete Electronic Governor system for a natural gas / propane GM - CHEVY 5.7L 350 cu. in engine an externally mounted 225 series actuator.



INSTALLATION KIT KT121M



SPEED CONTROLLERS



GAC 225GS SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS-12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8m] Shielded Cable
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In display / Resistive variable speed input to 12 kHz

GMC – CHEVROLET 5.7 L / 350 ENGINE

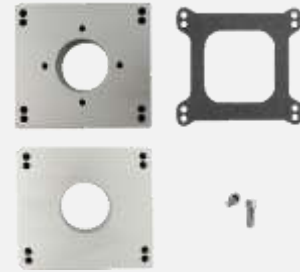
ATB INTEGRATED ACTUATOR

Electronic Governor system for a natural gas / propane GM - Chevy 5.7L 350 engine uses a GAC Throttle Body actuator with a customer supplied 225 IMPCO Carburetor.



[Installation instructions](#) are available on the GAC website.

INSTALLATION KIT KT41761



SPEED CONTROLLERS



ATB SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB452T2N -12, 24 EC1300	45 mm 200° F integrated actuator throttle body Mating connector
Adapter	KT1932	Optional adapter for spread bore intake manifold
Installation Kit	KT41761	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] Shielded Cable
Potentiometer	TP501	Optional 5K Potentiometer
Speed Controllers	ESD5526E	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive variable speed input to 12 kHz

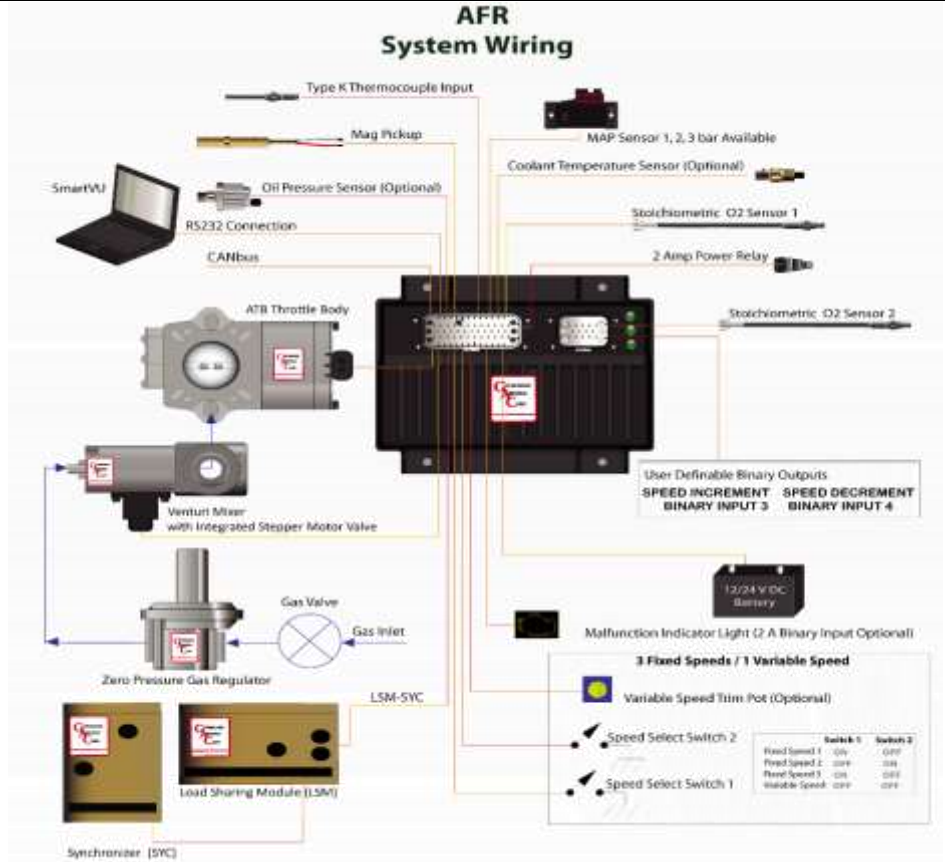
GMC – CHEVROLET 5.7 L / 350 ENGINE

AIR-FUEL RATIO CONTROL

This complete electronic governor system for a natural gas / propane GM - Chevy 5.7L 350 engine uses the AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



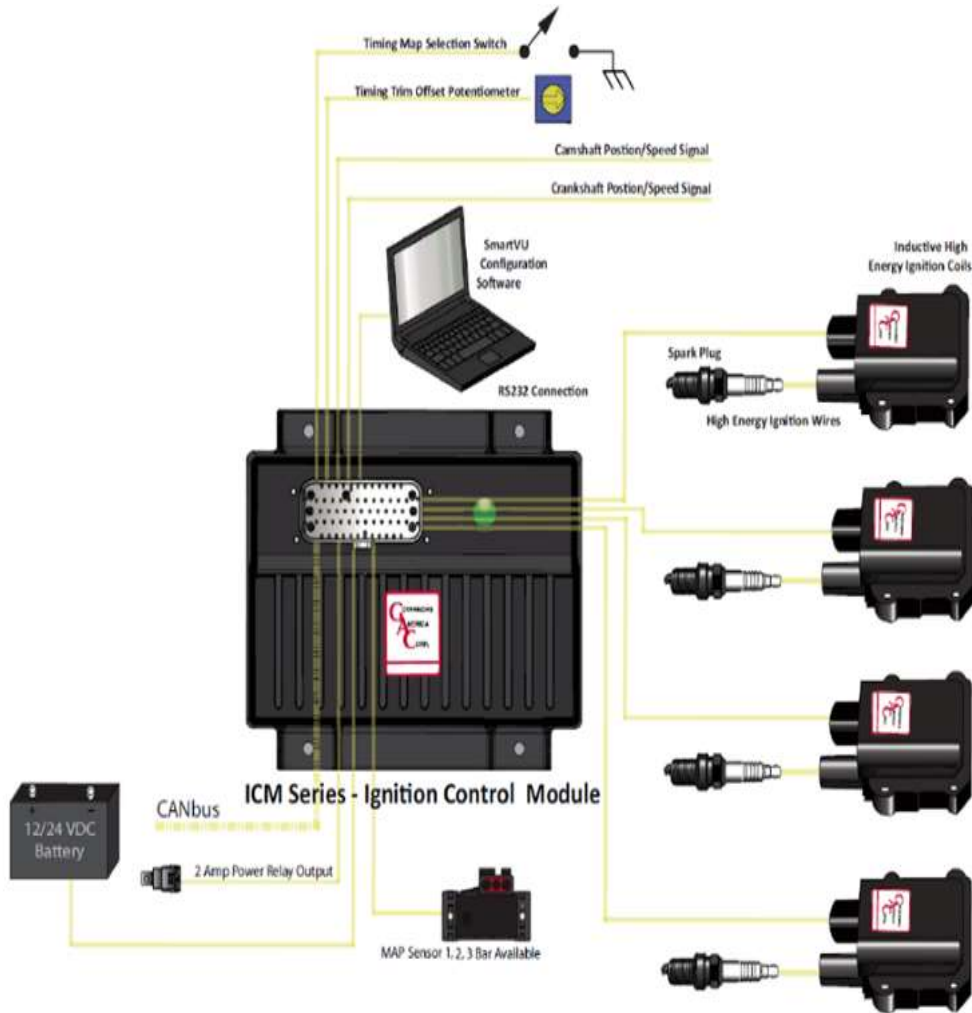
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB452T2N-12/24, CH1215	45 mm 200 F° integrated actuator throttle body
Speed Controller	AFR210, CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB42-STM, VFC106	Small bore, 3/4 in NPT fitting ATB T2, Impco control valve
AFR MAP Load Sensor	SPM200-1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02-1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101-12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507, EC1509, EC1506, EC1505, EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

GMC – CHEVROLET 5.7 L / 350 ENGINE

ICM IGNITION CONTROL MODULE

This is a complete ignition control system for a natural gas / propane GM - Chevy 5.7L 350 8-cylinder engine using the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-8 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



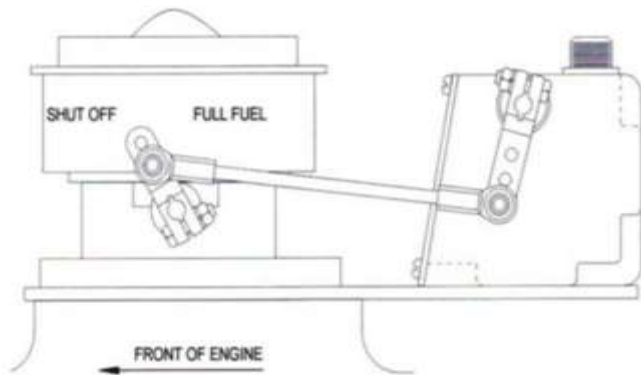
NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-8 , CH1215	ICM 8 cylinder sequential, 16 cylinder wasted-spark, mating connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602 , EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder Assembly
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication

GMC – CHEVROLET 7.4 L / 454 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

A complete Electronic Governor system for a natural or propane gas GM - Chevy 7.4L (454 cu. in.) 8-cylinder engine with a square block intake uses an external mounted 225 series actuator.



INSTALLATION KIT KT121M



SPEED CONTROLLERS



GAC 225GS SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS -12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69mm] Thread Length / 6 ft. [1.8m] Shielded Cable / Flying Leads / Stainless
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

GMC – CHEVROLET 7.4 L / 454 ENGINE

ATB INTEGRATED ACTUATOR

An electronic governor system for a natural gas or propane GM - Chevy 7.4L (454 cu. in.) V-8 engine with a customer supplied 425 IMPCO Carburetor uses a GAC Throttle Body .



[Installation instructions](#) are available on the GAC website.

INSTALLATION KITS KT41761 and KT425



SPEED CONTROLLERS



ATB SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N -12, 24	55 mm 200 F integrated actuator throttle body
Installation Kit	KT41761 KT425 KT1932	Installation kit for 4-barrel intake or "F" for small 4-hole intake manifold Adapter to 425 Impco to throttle body Optional spread bore intake manifold adapter
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] Shielded Cable
Potentiometer	TP501	Optional 5K potentiometer
Speed Controllers	ESD5526E	Analog Multi-V DC / Standard Unit up to 7.5 kHz, Smoke limiting
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

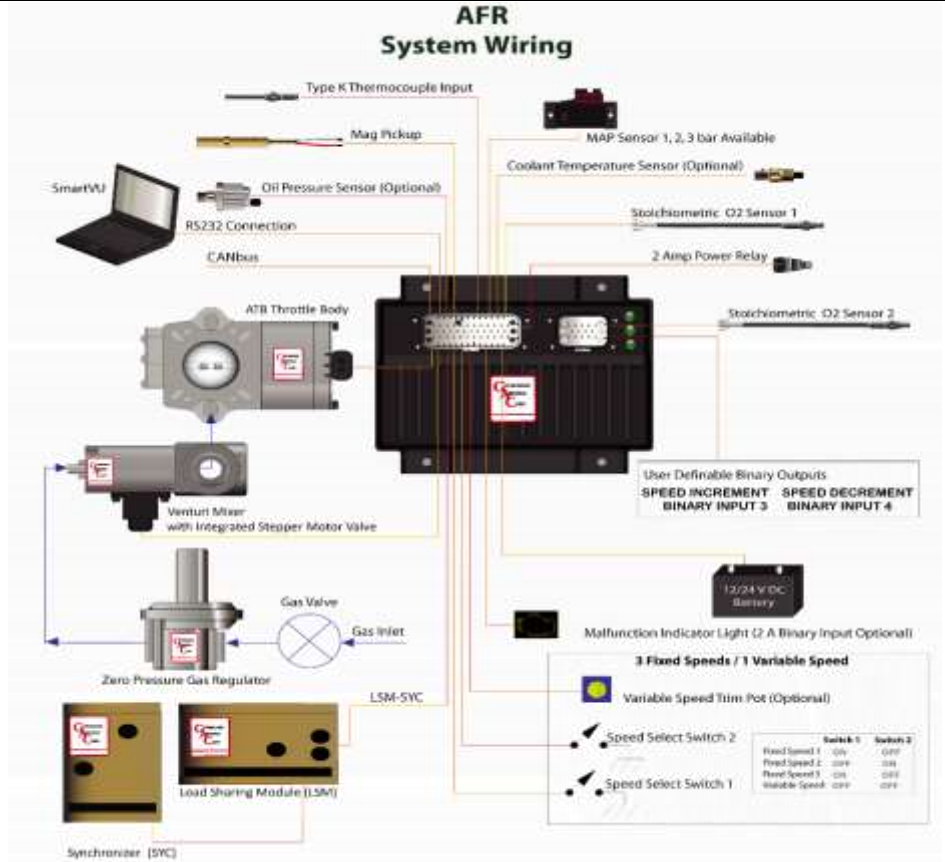
GMC – CHEVROLET 7.4 L / 454 ENGINE

AIR-FUEL RATIO CONTROL

This complete electronic governor system for a natural gas or propane GM - Chevy 7.4L (454 cu. in.) V-8 engine uses the AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



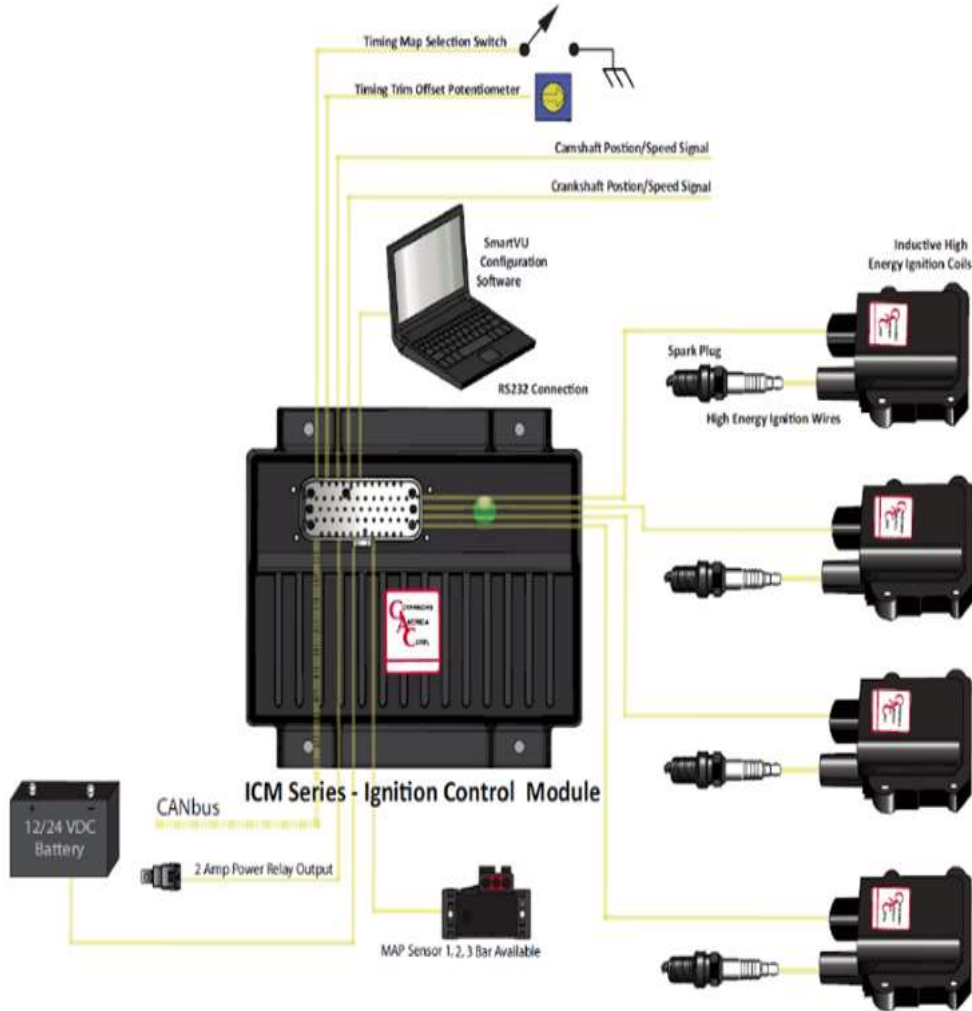
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N-12/24, CH1215	55 mm 200 F° integrated actuator throttle body
Speed Controller	AFR210, CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB42-STM, VFC106	Small bore, 3/4 in NPT fitting ATB T2, Impco control valve
AFR MAP Load Sensor	SPM200-1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02-1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101-12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507, EC1509, EC1506, EC1505, EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

GMC – CHEVROLET 7.4 L / 454 ENGINE

ICM IGNITION CONTROL MODULE

This is a complete ignition control system for a GM - Chevy 7.4L (454 cu. in.) 8-cylinder engine using the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-8 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



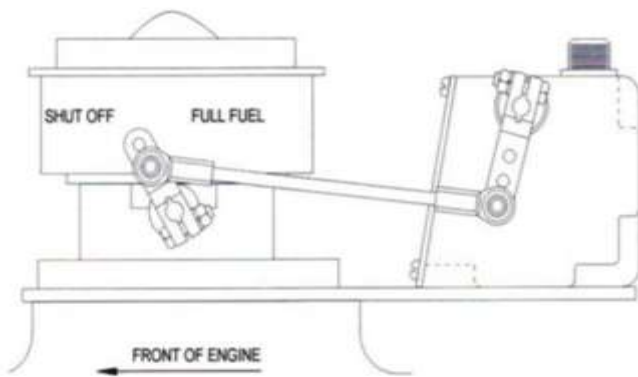
NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-8 , CH1215	ICM 8 cylinder sequential, 16 cylinder wasted-spark, mating connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602 , EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder Assembly
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication

GMC 8.1 L 8100 ENGINE

UNIVERSAL 225 SERIES ACTUATOR

A complete Electronic Governor system for a natural gas or propane GM 8.1L 8-cylinder engine using an external mounted 225 series actuator.



INSTALLATION KIT KT121M



SPEED CONTROLLERS



GAC 225GS SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ADC225GS-12 or 24	Rotary output, linear torque, proportional servo 12 or 24 V DC
Installation Kit	KT121M	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69mm] Thread Length / 6 ft. [1.8m] Shielded Cable / Flying Leads / Stainless
Speed Controllers	ESD5111	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	ESD5500E	Analog Multi-V DC / Standard Unit up to 7.5 kHz Smoke Limiting
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input up to 12 kHz

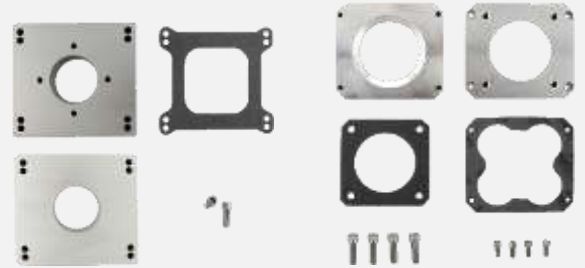
GMC 8.1 L 8100 ENGINE

ATB INTEGRATED ACTUATOR

Electronic Governor system for a natural gas or propane GM 8.1L 8-cylinder engine using a GAC Throttle Body with 225 IMPCO Carburetor.



INSTALLATION KITS KT41761 and KT425



SPEED CONTROLLERS



ATB SERIES ACTUATOR



NOTE: All components are sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N-12, 24	55 mm 200 F integrated throttle body
Installation Kit	KT41761 KT425	Installation kit for 4-barrel intake
Magnetic Pickup	MSP6729	2.7 in. [69mm] Thread Length / 6 ft. [1.8m] Shielded Cable
Potentiometer	TP501	Potentiometer
Speed Controllers	ESD5526E	Analog Multi-V DC / Standard Unit up to 7.5 kHz
	ESD5159	Analog Multi-V DC / Expanded Frequency Range 14 kHz
	EEG6500	Digital Multi-V DC / Built-In Display / Resistive Variable Speed Input to 12 kHz

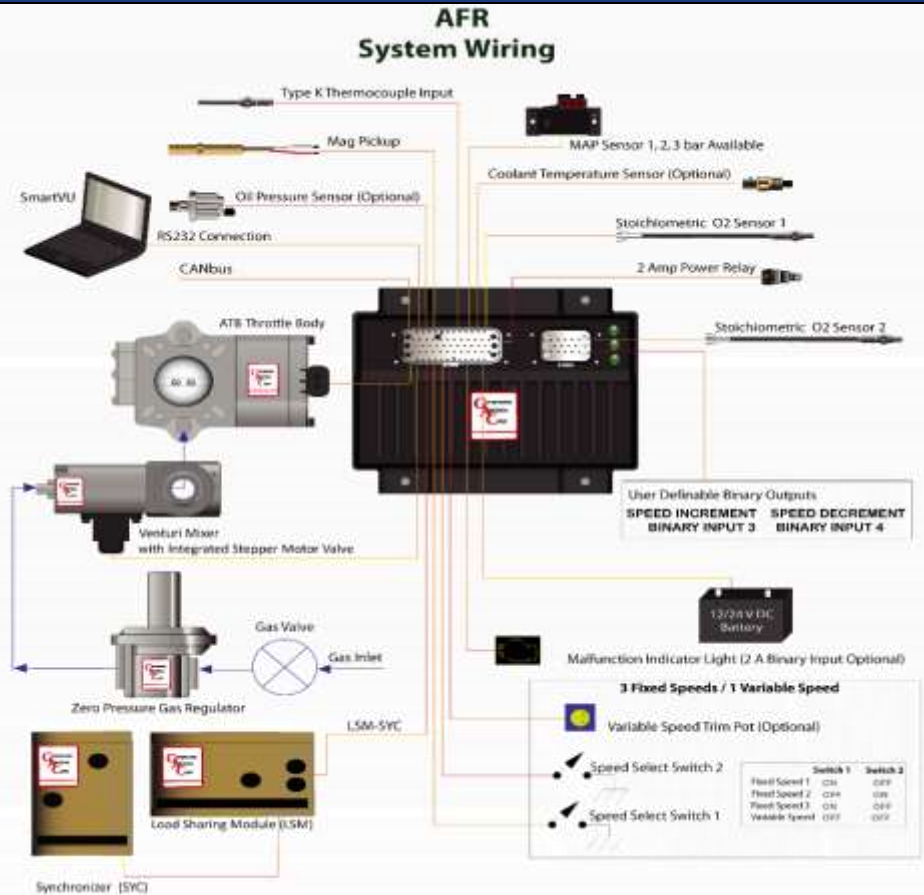
GMC 8.1 L 8100 ENGINE




AIR-FUEL RATIO CONTROL

This complete electronic governor system for a natural gas or propane GM 8.1L 8-cylinder engine uses the GAC AFR integrated air fuel ratio control system.

See the [GAC AFR Installation Guide](#).

All components are sold separately.



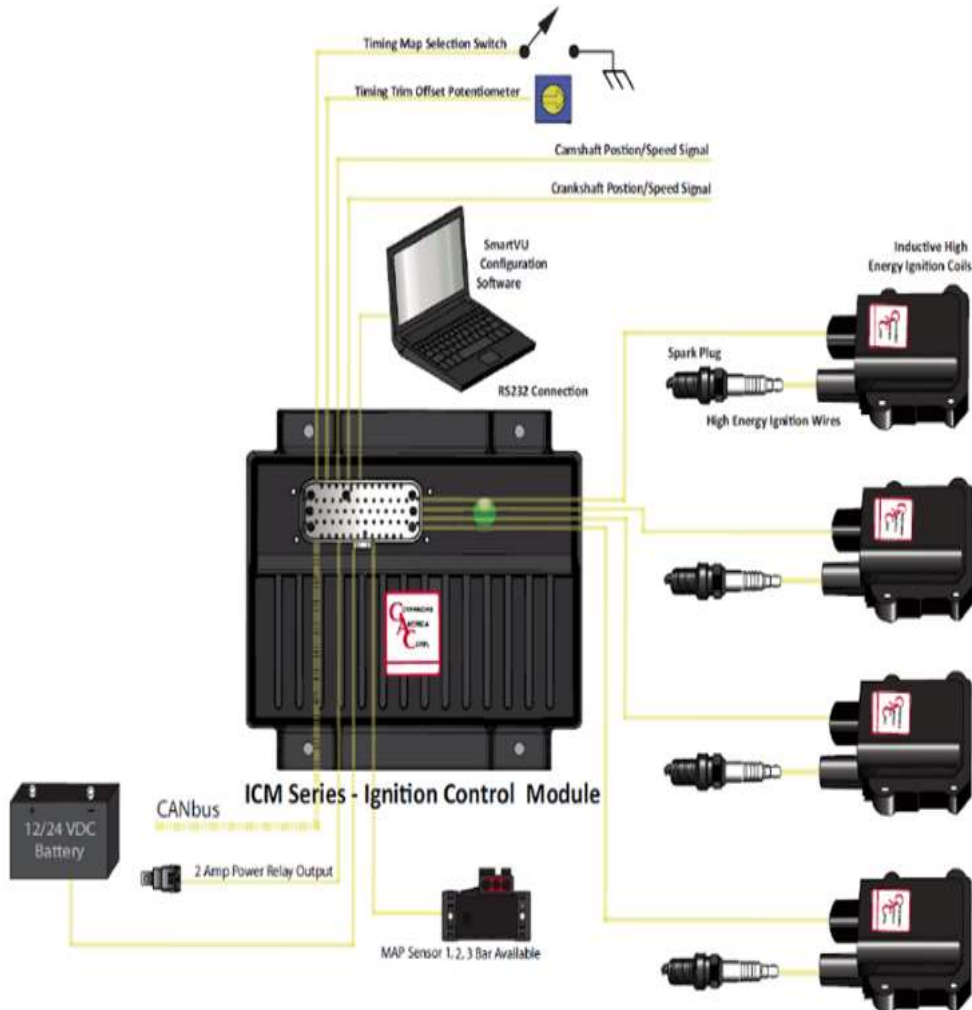
GAC AFR200 SERIES CONTROLLER	ATB SERIES ACTUATOR	SENSORS
		
COMPONENT	PART NUMBER	DESCRIPTION
Actuator	ATB552T2N --12/24, CH1215	55 mm 200 F° integrated actuator throttle body
Speed Controller	AFR210 , CH5119,	Multi V DC gaseous controller, Wiring harness
Mixer/Stepper Fuel Control	MXMB42-STM , VFC106	Small bore, 3/4 in NPT fitting ATB T2, Impco control valve
AFR MAP Load Sensor	SPM200-1B	MAP 1.0 bar (absolute) MAX
Pressure gas regulator	RPR103	Maxitrol R600Z 1 in NPT • Inlet Pressure 5.0 psi MAX
Exhaust gas sensor	SOX104	Wideband Oxygen Sensor
Power relay	RLY02-1009	12 V DC, 30 A Power Relay, SPDT; Normally Open
Oil Pressure Sensor	SPO100	1-180 PSIG
Coolant Temp Sensor	STC101	Engine Monitoring
Exhaust Temp Sensor	STE101	Type K thermocouple
Shutoff	SOS101-12	Solenoid shutoff, 12 V DC 1 in NPT direct acting
Magnetic Pickup	MSP6729	2.7 in. [69 mm] Thread Length / 6 ft. [1.8 m] shielded cable
Installation Kit	KT41761	Adaptor Intake Manifold Square Bore Holley
Connectors	EC1507 , EC1509 , EC1506 , EC1505 , EC1516	MXSTM, SPM2001B, Relay holder, Fuse holder, Serial port
USB to RS232 Adapter	EAM204	For PC interface

GMC 8.1 L 8100 ENGINE

ICM IGNITION CONTROL MODULE

This is a complete ignition control system for a natural gas or propane GM 8.1L 8-cylinder engine using the GAC ICM Ignition Control Module.

Details are available in [GAC ICM Installation Guide](#).



GAC ICM200-8 MODULE



ICM TIMING/POSITION SENSOR



CL602 IGNITION COIL



NOTE: All components sold separately.

COMPONENT	PART NUMBER	DESCRIPTION
Ignition Control Module (ICM)	ICM200-8, CH1215	ICM 8-cyl sequential, 16-cyl wasted-spark, connector
Trigger Wheel	GR104	Standard timing wheel; 68 mm (sequential firing 24-1)
Ignition Coils, Connector	CL602, EC1504	12 V DC Single Output, Sequential Spark Connector
Spark Plugs	SPG100-001	Spark Plug special CNG (Iridium)
Spark Plug Wire Kits	SPW100	Single spark plug wire
Engine Timing/Position Sensor	SCI103	Hall Effect, 90 Degree
Mating Connectors	EC1504, EC1519, EC1506, EC1505	SCI100, SCI103, Relay Mating Connector, Fuse Holder
Power Control Relay	RLY02-1009	Power Relay Kit, 12V only, 1-pole, N.O.
RS-232 PC Interface	EC1516	DB-9 Female Connector & Backshell,
USB to RS232 adapter	EAM204	Computer software communication