FuelTech FT400 pinout

ecurecovery.com/pinouts/fueltech/ft400 · Every pin checked against 2 FuelTech documents · data checked 2026-11-04

Connector MAIN · 24-pin

Connector AUX · 16-pin

FuelTech's documents list the pins but do not draw the plug, so we do not draw it either.

FuelTech FT400 connector MAIN pinout (24-pin)

Pin	Function	Wire	FuelTech note
MAIN-1	Tachometer output	Green	RPM signal output for tachometers and auxiliary modules.
MAIN-2	Auxiliary output 3	Yellow – 3 Yellow	Must be configured prior to the installation.
MAIN-3	Input 1 – intake air temperature Sensor	White/Blue	The other sensor pin must be connected to the negative.
MAIN-4	Auxiliary output 2	Yellow – 2 Yellow	Must be configured prior to the installation.
MAIN-5	Input 2	White	Must be configured according to the sensor used. FT400: connected to the fuel pressure sensor. FT350: configurable as fuel or oil pressure or O2 sensor input
MAIN-6	Auxiliary output 1	Yellow – 1 Yellow	Must be configured prior to the installation.
MAIN-7	Input 3 – engine coolant temperature sensor	Pink	The other sensor pin must be connected to the negative.
MAIN-8	Auxiliary output 4	Yellow – 4 Yellow	Must be configured prior to the installation.
MAIN-9	Input 4	Blue	Must be configured in accordance with the sensor or function used. FT400: connected to the oil pressure sensor. FT350: configurable as fuel or oil pressure or 2-step input
MAIN-10	Ignition output E	Gray – E Grey	
MAIN-11	Signal from the TPS sensor TPS 1 for electronic throttle	Orange	Connect the 3 TPS wires in a way which, when measuring the resistance between the green/red and black wires in the cable, the value does not vary.
MAIN-12	Ignition output D	Gray – D Grey	
MAIN-13	MAP signal output	Yellow/Red	Connected to a datalogger, it informs the pressure/vacuum read by the injection inner MAP.
MAIN-14	Ignition output C	Gray – C Grey	
MAIN-15	Camshaft position sensor input	Green/Yellow	It reads inductive or Hall effect sensors. It must be configured prior to the installation.
MAIN-16	Ignition output B	Gray – B Grey	
MAIN-17	RPM signal input	-	Must be connected to the crankshaft trigger sensor (inductive or Hall) or to the Hall distributor – Discard shield
MAIN-18	Ignition output A	Gray – A Grey	
MAIN-19	Battery's negative terminal	Black, Shield Black Shielded	Must be directly connected to the battery; no add-ons or seams allowed. Cannot be connected to vehicle chassis.
MAIN-20	5V feed for sensors	Green/Red	Feed for TPS, as well as other sensors.
MAIN-21	Switched 12V supply	Red	Connect directly to ignition switch.
MAIN-22	Power Ground	Black/White	Connected directly to the battery negative, seamlessly. Do not join this wire with the black wire before the battery terminal. They can only

Pin	Function	Wire	FuelTech note
MAIN-23	Negative terminal from fuel injectors – Bank “B”	Brown	See chapter 6 in this manual for more information about these outputs and their connections.
MAIN-24	Negative terminal from fuel injectors – Bank “A”	Purple	See chapter 6 in this manual for more information about these outputs and their connections.

FuelTech FT400 connector AUX pinout (16-pin)

Pin	Function	Wire	FuelTech note
AUX-1	O2 sensor input	White #1 White	Connected to a wideband lambda O2 conditioner analog output or to a narrowband O2 sensor.
AUX-2	Ignition output F	Gray - F Grey	
AUX-3	Electronic throttle TPS 2	Orange #2 Orange	When used with electronic throttle, it must be connected to the throttle’s TPS 2.
AUX-4	Auxiliary output #7	Yellow #7 Yellow	It must be configured prior to the installation.
AUX-5	Two-Step input	White #2 White	Two-step button (activated by negative signal).
AUX-6	Auxiliary output #6	Yellow #6 Yellow	It must be configured prior to the installation.
AUX-7	A/C button input	White #3 White	Air conditioning actuation signal. It must be connected to the A/C button on the dashboard. The actuation polarity can be configured.
AUX-8	Auxiliary output #5	Yellow #5 Yellow	It must be configured prior to the installation.
AUX-9	Power ground	Black/white	Connected directly to the battery negative, seamlessly. Do not join this wire with the black wire before the battery terminal. They can only
AUX-10	PEDAL signal #1	Orange/Blue #1 Orange/blue	It must be connected to the pedal position sensor PEDAL1.
AUX-11	Throttle or pedal ground output	Green/Black	Connected to the TPS or the pedal sensor. When not using electronic throttle, connect this wire to battery negative.
AUX-12	PEDAL signal #2	Orange/Blue #2 Orange/blue	It must be connected to the pedal position sensor PEDAL2.
AUX-13	Electronic throttle motor #1 Step motor (coil #1)	Brown/White #2 Brown/white	To constitute the MOTOR 1 wire, join both Brown/White wires and connect to the throttle.
AUX-14	Electronic throttle motor #2 Step motor (coil #2)	Purple/White #2 Purple/white	To constitute the MOTOR 2 wire, join both Purple/White wires and connect to the throttle.
AUX-15	Electronic throttle motor #1 Step motor (coil #1)	Brown/White #1 Brown/white	To constitute the MOTOR 1 wire, join both Brown/White wires and connect to the throttle.
AUX-16	Electronic throttle motor #2 Step motor (coil #2)	Purple/White #1 Purple/white	To constitute the MOTOR 2 wire, join both Purple/White wires and connect to the throttle.

Where this comes from

FuelTech manual for this ECU (harness connections table)

FuelTech FT350 / FT400 manual (5.1 / 5.2 harness connections)

FuelTech FT450 / FT550 / FT600 manual, chapter 9: the old harness wire by wire

FuelTech FT450 / FT550 / FT550LITE / FT600 manual, chapter 9.2 (old FT400 harness, wire by wire)

FuelTech connector drawing in the same manual, read by eye

FuelTech FT400 manual connector drawing ("Harness Connector Rear View"), read by eye