

HYBRID ENGINE: HYBRID SYNERGY DRIVE - GASOLINE AND MANUAL OR ELECTRIC



Model AM 554

Sci-tech Hybrid Engine System Model AM 554 has two sources of power, the petrol engine and the electric motor.

The THS recovers energy otherwise lost to heat in the brakes and uses it to supplement the power of its fuel-burning engine. MG1 (motor generator 1) generates electrical power and starts the engine; MG2 (motor generator 2) drives the vehicle. During deceleration the wheels drive MG2 which acts as a generator for regenerative power recovery. The THS uses different modes to achieve the most efficient operation in response to driving conditions.

Specifications

- 4 cylinders
- Displacement: 1500 cc
- DOHC overhead camshaft

HYBRID ENGINE: HYBRID SYNERGY DRIVE - GASOLINE AND MANUAL OR ELECTRIC



- 4 valves per cylinder
- Roller chain
- VVT-I system (Variable Valve Timing with intelligence) electronically controlled intake valves
- Multi-point electronic injection with throttle
- Electrical engine
- Epicyclical engine
- Generator
- Transmission belt (CTV)
- Gears
- Differential group
- Exhaust manifold with Lambda probe

Manual Model AM 554M:

The engine is mounted on a stand with wheels and it is operated manually by means of one crank handle placed on the thermal engine and one on the electric engine in order to simulate the different cycles.

Electrical Model AM 554E:

Same as AM 554M but operated electrically by means of two electric motors: one on the petrol engine and the other on the generator. The electric motors can be operated separately or simultaneously, according to teaching requirements. The engine is provided with nomenclature panel.

Specifications, Model Photos and design subject to changes without any notice