



OFF-ROAD PROPULSION SYSTEM PWT 1003

LOMBARDINI has conceived and is proposing a complete propulsion system ideal for equipping off-road heavy utility vehicles.

This concept combines the typically facilitated driving of a traditional automatic transmission with continuously variable ratio with the precision and robustness of a typical A.T.V. gear box.

It is ideal to power vehicles till 20 kW and allows the possibility to upgrade the product for power transmission up to 25 kW.



FEATURES

The propulsion system is composed of:

Diesel engine, FOCS family, LDW1003 – 3 cylinders, water cooled.
(Possible powering with LDW 702 – 2 cylinders, water cooled).

The system's architectural structure allows also the possibility to utilize the FOCS gasoline version.

ENGINE	Rating kW/HP din N	Max torque Nm@rpm	Speed rpm	Displacement cm ³	Cylinders N.
LDW 702 Power Train	12,5/17	40@2000	3600	686	2
LDW 1003 Power Train	15,0/20,4	57@2000	3600	1028	3
	18,8/25,5		3600		

The PWT 1003 engine is ideal for all automotive applications and offers two power configurations:

- 15,0 KW at 3600 RPM, for heavy quadricycles. Power is limited to comply with 2002/51/CE regulation.
- 18,8 KW at 3600 RPM, for off-road and special vehicles such as UTVs, quads, snowmobiles and buggies. This engine meets the emission limits specified in EPA Tier IV and 97/24 CE standards.



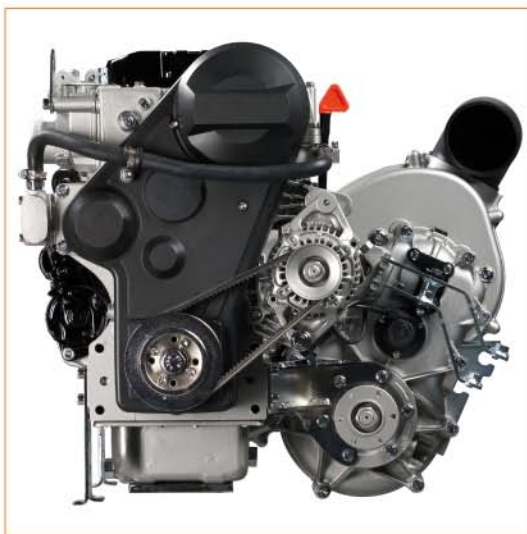
FEATURES

OFF-ROAD PROPULSION SYSTEM



Mechanical CVT features:

- Designed for strenght.
- No required maintenance.
- Simple design including 50% less parts than the competition.
- Engine brake effect in slowing-down phase right up to complete stop of the vehicle.
- Range 4.

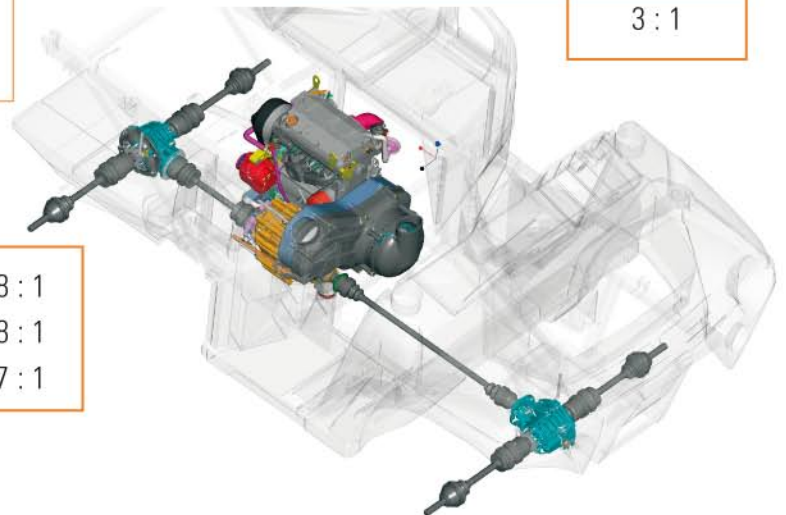


Gearbox with incorporated reverse reduction gear and differential system specifically conceived for off-road work vehicles. The main features are:

- Possibility of 2 or 4 WD functionality mode (integral traction to be manually inserted).
- Speed sensor for electronic speedcounter (optional).
- 2 forward gears (LOW / HIGH) + Reverse.
- Integrated oil breather system

Suggested differential ratio:

3 : 1



Gear ratio:

Low forward	5,28 : 1
High forward	9,38 : 1
Reverse	7 : 1

ADVANTAGES

- Great stability thanks to the central position of the barycentre (between the 4 wheels)
- Easy and comfortable driveability thanks to the performance offered by the new mechanical Lombardini CVT, superior compared to the current CVT on the market.
- Elevated transmission efficiency thanks to the innovations effected on the mechanical CVT.
- Tested and reliable professional transmission with over 40.000 km running.
- Engine brake effect available in slowing-down phase right up to complete stop of the vehicle.
- Ideal propulsion system for vehicle for a total weight with full load of up to 1200kg.
- Possibility of 2 or 4 WD functionality mode.