

2 parts are needed for Д-12 engine which will be installed on MA3-7310 fire truck. This truck is based on MA3-543, spare parts are same.



1. engine flywheel – маховик

This piece is heavy. Exact weight of the required part is unknown but as an example, flywheel for water-pumping engine what we have is 72kg!

Spare part code might be: c61205-02-2 or c61205-02-3

Whats the difference, is unknown. Must use measurements and pictures to identify!

Part codes source:

<http://xn--80ach6afeahjggr.xn--p1ai/main/catalog/d12a-525a/val-kolenchatyj/>

2. torque damper - Демпферное соединение

Spare part code 543-1605010-01 MA3-543 (7310).

Source:

https://www.avtoall.ru/catalog/maz-11/spectehnika-42/maz_543_7310_-1146/dempfernoe_soedinenie_543_1605010_01-93/

Note that these parts may be available on a scrapped D12 engines but different modifications of the D12 engines had also different flywheels. D12 engines were used on water pumps, generators, smaller locomotivs and БелАЗ-540 trucks, so the engines should be available but most probably they have different flywheels, without torque damper.

We are looking for a flywheel and a damper suitable for automatic/hydraulic transmission.

Flywheels made for regular clutch applications will not fit to our truck.



Flywheel and damper - note how damper on the right fits into flywheel with the 12 bolts on upper picture. Bolts and stoppers are optional. Its good to have them but probably can replace them.
Flywheel measurements on next pages.

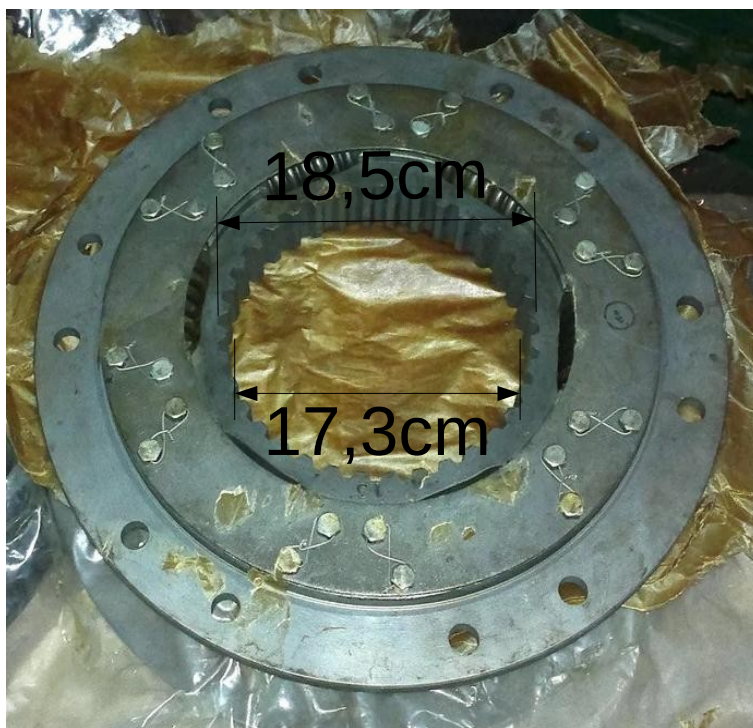
Another view of the damper – new spare part with measurements.

Number of teeth on inner gear 36.

Diameters have been measured from matching gear on the gearbox. Slight error is allowed.

Inside gear circle diameter 17,3cm, can be ~2mm larger.

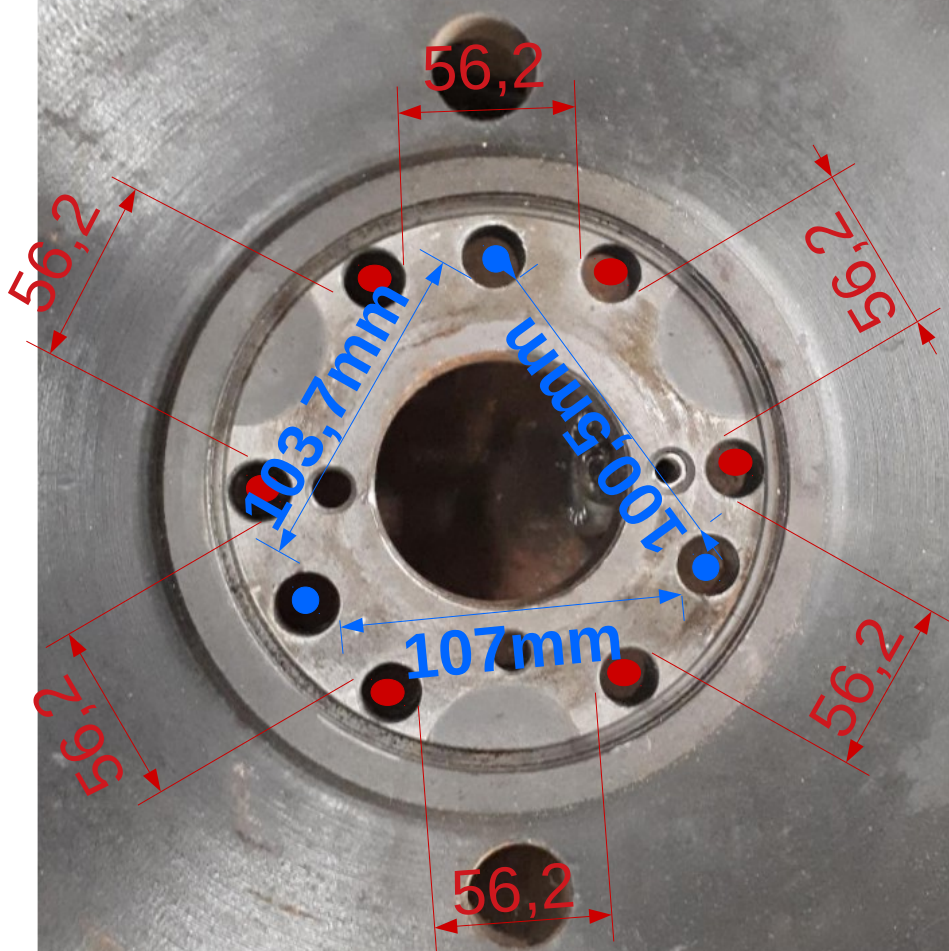
Outside gear circle diameter 18,5cm, can be ~2mm larger.



Back side of the flywheel



6 holes for flywheel mounting bolts
hole diameter 19mm
Shortest distance measured with
Caliper from hole to hole 56,2mm



3 holes for matching pins
on the crancshaft.
Pin hole diameter 20mm
Distances between holes are
not all same, shown on image

Pictures from spare parts catalog:

