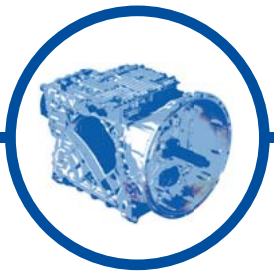


# WABCO Automated Manual Transmission

## Aftermarket solutions for gearbox control units for Volvo applications



### WABCO gearbox control units for Volvo applications

The AMT gearbox actuator for Volvo commercial vehicles makes driving easier, safer and more comfortable by automating the shifting process. With regard to shafts and gear wheel sets, it is very similar to a standard manual transmission. However, the shift linkage and the manual gear control lever are replaced with an electronically-controlled and electro-pneumatically operated gear changing system. The transmission has 12 forward gears and four reverse gears.

### Generations

There are different generations of Volvo gearbox actuators on the market. Identifying each generation is easy: simply check the name plate, located at the top of the transmission bell housing, and look for the final letter.



### Easy Diagnostics

Our AMT technology for Volvo vehicles can be easily diagnosed using multi-brand diagnostic solution supplied by WABCO WÜRTH (W.EASY®) – available for independent aftermarket workshops. It is competitively priced and expertly tailored for WABCO products, resulting in excellent reliability and precision for our gearbox control units repair solutions.

The WABCO WÜRTH diagnostic software is clearly structured, with an easy-to-operate interface. All critical diagnostic functions are displayed, enabling swift and straightforward system analysis.

W.EASY can be ordered via the WABCO Würth distribution network. For more details, see [www.wabcowuerth.com](http://www.wabcowuerth.com)

### Simple teach-in procedure

Following repair, a teach-in procedure must be performed on the gearbox control unit. It could not be easier with the multi-brand diagnostic solution W.EASY offered by WABCO WÜRTH. Simply:

- Connect the system via the on-board diagnostics (OBD) interface.
- Start the teach-in procedure via the WABCO WÜRTH diagnostic.
- Follow the instructions given by the software.

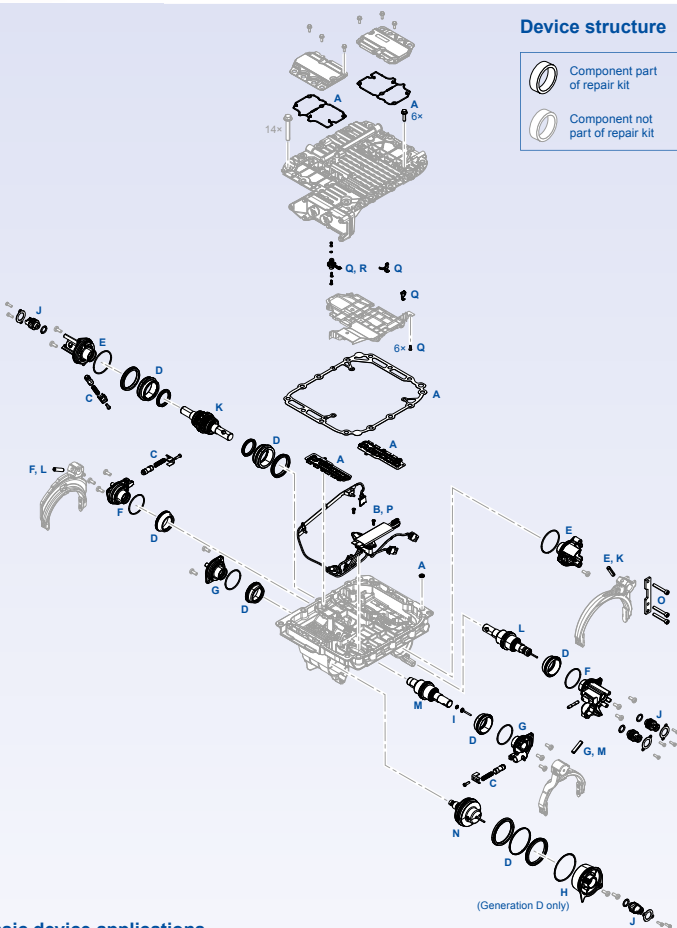
### Generation B & D



Generation B has an external clutch cylinder installed on the outside. It has been available for series supply since 2001.



The C and D generation have an internal clutch cylinder. In comparison to the C generation, the D generation is equipped with a modified rotational speed sensor. It has been available for series supply since 2008.



#### Device structure

- Component part of repair kit
- Component not part of repair kit

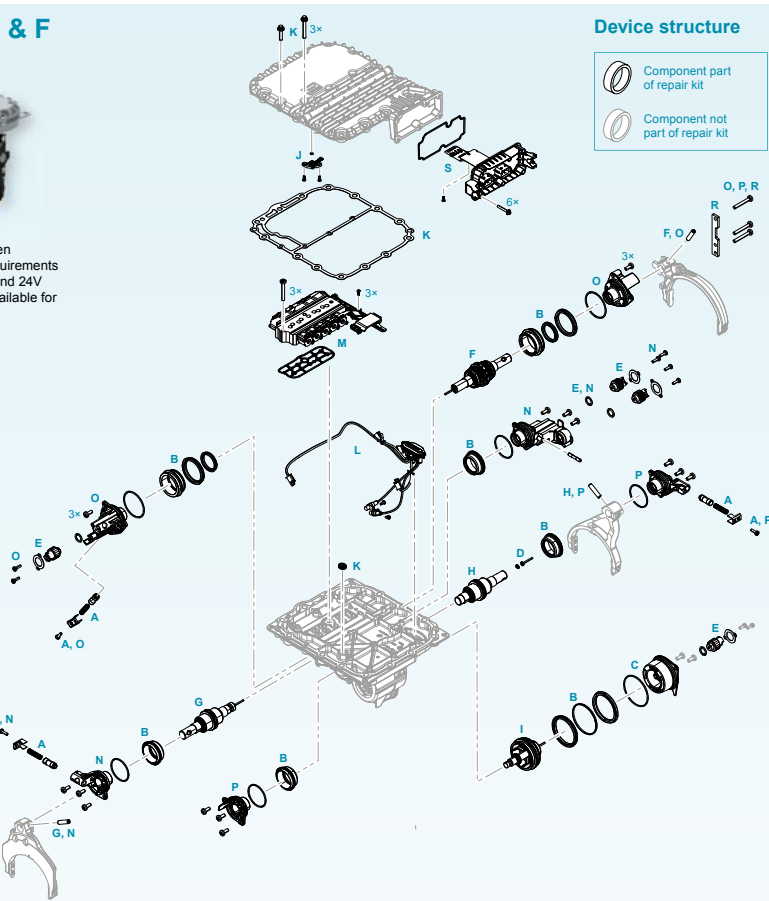
#### Overview of repair kits / basic device applications

Position	Main component	Generation	Repair kit number		Basic device application			
			Cross references		Gen. B	Generation D		
			WABCO	Volvo	Renault	421 365 ...	12 V 421 364 ...	24 V 421 365 ...
A	Static sealing	B, D	421 365 920 2	20785252	7420785252	✓	✓	✓
B	Connector bridge	B	421 365 921 2	20562627	7420562627	✓	✓	✓
C	Kit with detents	B, D	421 365 922 2	20562629	7420562629	✓	✓	✓
D	Lip seal & piston kit	B, D	421 365 923 2	20562630	7420562630	✓	✓	✓
E	Cylinder cover (split cylinder)	B, D	421 365 924 2	20562631	7420562631	✓	✓	✓
F	Cylinder cover (1/R cylinder)	B, D	421 365 925 2	20562633	7420562633	✓	✓	✓
G	Cylinder cover (2/3 cylinder)	B, D	421 365 926 2	20562635	7420562635	✓	✓	✓
H	Range cylinder cover with sealing	D	421 365 927 2	20562636	7420562636	✓	✓	✓
I	Armature, conical spring for shift fork 2/3	B, D	421 365 928 2	20562640	7420562640	✓	✓	✓
J	Distance sensor	B, D	421 365 929 2	20562642	7420562642	✓	✓	✓
K	Piston rod for split cylinder	B, D	421 365 932 2	21786063	7421786063	✓	✓	✓
L	Piston rod for 1/R cylinder	B, D	421 365 933 2	21302092	7420562107	✓	✓	✓
M	Piston rod for 2/3 cylinder	B, D	421 365 934 2	22781280	7422781280	✓	✓	✓
N	Range piston	B, D	421 365 935 2	20562111	7420562111	✓	✓	✓
O	Stop sheet metal for the split group	B, D	421 365 939 2	20845917	7420845917	✓	✓	✓
P	Connection bridge	D	421 365 946 2	21068284	7421068284	✓	✓	✓
Q	Pressure sensor kit	B, D	421 365 947 2	21068286	7421068286	✓	✓	✓
R	Pressure sensor module	B	421 367 900 2	22242765	–	✓	–	–

### Generation E & F



Generation E & F have been adjusted to meet Euro 6 requirements and are available in a 12V and 24V version. They have been available for series supply since 2013.



#### Device structure

- Component part of repair kit
- Component not part of repair kit

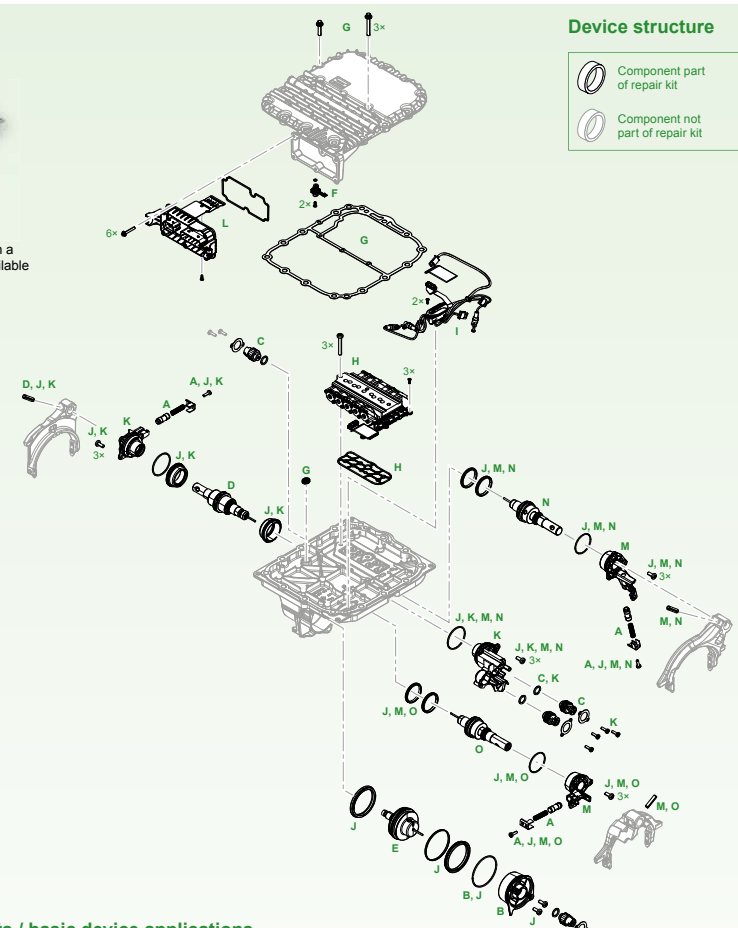
#### Overview of repair kits / basic device applications

Position	Main component	Repair kit number			Basic device application			
		WABCO	Cross references		Generation E	Generation F		
			Volvo	Renault	421 367 001 0	421 366 001 0	421 366 002 0	421 367 002 0
A	Kit with detents	421 365 922 2	20562629	7420562629	✓	✓	✓	✓
B	Lip seal & piston kit	421 365 923 2	20562630	7420562630	✓	✓	✓	✓
C	Range cylinder cover with sealing	421 365 927 2	20562636	7420562636	✓	✓	✓	✓
D	Armature, conical spring for shift fork 2/3	421 365 928 2	20562640	7420562640	✓	✓	✓	✓
E	Distance sensor	421 365 929 2	20562642	7420562642	✓	✓	✓	✓
F	Piston rod for split cylinder	421 365 932 2	21786063	7421786063	✓	✓	✓	✓
G	Piston rod for 1/R cylinder	421 365 933 2	21302092	7420562107	✓	✓	✓	✓
H	Piston rod for 2/3 cylinder	421 365 934 2	22781280	7422781280	✓	✓	✓	✓
I	Range piston	421 365 935 2	20562111	7420562111	✓	✓	✓	✓
J	Pressure sensor module	421 367 900 2	22242765	–	✓	✓	✓	✓
K	Static sealing	421 367 921 2	21911585	7421911585	✓	✓	✓	✓
L	Connecting bridge	421 367 922 2	21911586	7421911586	✓	✓	✓	✓
M	Valve unit with sealing	421 367 924 2	21911584	7421911584	✓	✓	✓	✓
N	Cylinder cover for 1/R cylinder	421 367 927 2	21911592	7421911592	✓	✓	✓	✓
O	Cylinder cover for split cylinder	421 367 928 2	21911591	7421911591	✓	✓	✓	✓
P	Cylinder cover 2/3 cylinder	421 367 929 2	21911596	–	✓	✓	✓	✓
R	Sheet for split cylinder	421 367 930 2	22242766	–	✓	✓	✓	✓
S	Connection support with sealing	421 367 931 2	22242764	–	✓	✓	✓	✓

### Generation PS



Generation PS is equipped with a double clutch and has been available for series supply since 2014.



#### Device structure

- Component part of repair kit
- Component not part of repair kit

#### Overview of repair kits / basic device applications

Position	Main component	WABCO	Repair kit number		Basic device application
			Cross references		
			Volvo	Renault	
A	Kit with detents	421 365 922 2	20562629	7420562629	✓
B	Range cylinder cover with sealing	421 365 927 2	20562636	7420562636	✓
C	Distance sensor	421 365 929 2	20562642	7420562642	✓
D	Piston rod for 1/R cylinder	421 365 933 2	21302092	7420562107	✓
E	Range piston	421 365 935 2	20562111	7420562111	✓
F	Pressure sensor module	421 367 900 2	22242765	–	✓
G	Static sealing	421 367 921 2	21911585	7421911585	✓
H	Valve unit with sealing	421 367 924 2	21911584	7421911584	✓
I	Connecting bridge	421 369 921 2	21911587	–	✓
J	Dynamic sealing kit	421 369 923 2	21911588	–	✓
K	Cover and piston kit for 1/R cylinder	421 369 924 2	21911595	–	✓
L	Connection support with sealing	421 369 925 2	–	–	✓
M	Cylinder cover for 2/3 cylinder, lip seals and o-ring for cylinder	421 369 926 2	21911597	–	✓
N	Rod kit for 3 cylinder, lip seals and o-ring for cylinder	421 369 927 2	21911598	–	✓
O	Rod kit for 2 cylinder, lip seals and o-ring for cylinder	421 369 928 2	21911599	–	✓