



engineering
garage equipment

MADE IN ITALY



USE, MAINTENANCE AND SPARE PARTS MANUAL



AGA PRO

EN

**AUTOMATIC WASHING AND OIL CHANGE
FOR AUTOMATIC GEARBOXES**

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1 INTRODUCTION

1.1 PURPOSE OF THE INSTRUCTION MANUAL

This use and maintenance manual contains information about the performance, technical specifications, methods of use and maintenance for the regular and correct operation of the machine.

Read this manual carefully and follow the rules and procedures herein, as they are very important for the safe use of the machine. This will optimise the operation, increase the machine's service life and allow you to work safely.

Failure to comply with the suggested rules may lead to malfunctions, faults or breakages; therefore, the machine is to be used only for the purpose for which it was created.

The **Manufacturer** will not be held liable for any breakage, accident or problems resulting from failure to comply with (or to apply) the instructions in this manual. The same applies to any unauthorised changes, variations and/or to the installation of unauthorised accessories.

1.2 HOW TO READ AND USE THE INSTRUCTION MANUAL

The machine was built in compliance with all the Community regulations in force concerning the free movement of industrial products between the European Community states (see the Machinery Directive 2006/42/CE).

The machine is, therefore, supplied with all the documentation required by these regulations.

The use, maintenance and spare parts manual is an integral part of the machine and contains all the information necessary for its proper operation, focusing mainly on the safety of the personnel.

1.3 MANUAL STORAGE

This booklet is an integral part of the machine and must be kept with care for any future reference.

- 1) Please use this manual with due care, paying attention not to damage its contents or compromise its functionality.
- 2) Do not remove, tear or write on any parts of the manual.
- 3) Keep the manual in a place protected from moisture and heat.
- 4) The user manual must be kept near the machine, for easy consultation.
- 5) The manual storage place must be clearly identifiable and known to all the operators authorised to work on the machine.
- 6) After consulting the manual, it must be put back in its place.
- 7) The manual must be kept throughout the entire service life of the machine and will accompany it in case of transfer of ownership.

1.4 INSTRUCTION MANUAL UPDATE

The **Manufacturer** reserves the right to make changes, additions or improvements to the manual, without affecting the appropriateness of this publication.

1.5 ADDRESSEES

This documentation is addressed to qualified and suitably trained technical personnel.

Only qualified personnel possess the necessary technical knowledge to correctly interpret and apply the safety rules and warnings contained in the specific documents.

The knowledge and correct application of the safety rules and warnings are essential for the safe installation, commissioning, operation and maintenance of the product described.

By "qualified personnel" we mean those persons that, thanks to their training, experience, education, knowledge of the relevant rules, instructions and measures for the prevention of accidents and of the service conditions, have been authorised by the system safety manager to carry out any necessary actions, being able to recognise and avoid any possible danger.

1.6 SYMBOLS



The texts in bold, preceded by this symbol, contain information/instructions that are very important for the proper operation of the machine. Failure to comply with them may lead to:

- loss of the contractual warranty;
- denial of liability by the **Manufacturer**.



The texts in bold, preceded by this symbol, contain requirements regarding the behaviour of the operators, aimed at keeping them safe. Failure to comply with them may lead to:

- risks to the safety of the operator;
- denial of liability by the **Manufacturer**.



The texts in bold, preceded by this symbol, contain warnings and important instructions for the safety of the operator. Failure to comply with them may lead to:

- risks to the safety of the operator;
- denial of liability by the **Manufacturer**.

2 GENERAL INFORMATION

2.1 IDENTIFICATION DATA OF THE MANUFACTURER

W.T.Engineering S.r.l.
via Ugo Foscolo, 96/F 24024 Gandino (BG) – Italy
ph. +39 035733399 - fax. +39 0357172834
info@wtengineering.it www.wtengineering.net



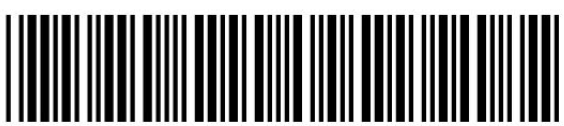
2.2 MACHINE IDENTIFICATION DATA

The system was built in compliance with the Machinery Directive 2006/42/ currently in force in the European Community in terms of safety. The machine is equipped with a CE marking plate and an identification plate. Please specify the serial number when requesting technical support or spare parts.

The identification plate must be cleaned regularly to make sure that all the data is legible.

If the plate gets damaged and/or any information on it is no longer legible, please request another one from the manufacturer specifying the data contained in this manual, and have it replaced.

2.3 CE PLATE

	W.T. Engineering S.r.l. Via Ugo Foscolo 96/F 24024 Gandino (BG) Italy	
<hr/>		
Art:	<input type="text"/>	V/Hz : <input type="text"/>
S/N:	<input type="text"/>	
Year:	<input type="text"/>	
Made in ITALY		

ART: Machine Model

V/Hz: Machine voltage and frequency

S/N: Machine serial number

Year: Year of construction of the Machine

2.4 GENERAL SAFETY RULES

➔ Besides the rules reported below, the system manager must also comply with the applicable regulations in force concerning safety and health in the workplace (Directive 2006/42/CE).

⚠ Always follow the safety rules and the instructions contained in this manual.

The **Manufacturer** declines all liability in case of incorrect use of the machine and of the equipment supplied.

⚠ The machine must be used by qualified personnel and can be used correctly only after reading this manual that contains the basic safety rules listed below:

- Wear protective gloves and safety glasses.
- When working in the presence of oils, it is necessary to follow the specific requirements for the type of product used.
- Before unplugging the equipment, make sure that the cycle ended and that there is no excessive pressure inside the tubes.
- Do not use in humid environments.
- Do not use near open containers filled with flammable substances.
- Pay the utmost attention to the operations carried out during use.
- Use only original parts.
- Do not expose to direct sunlight and rain.
- Do not smoke near the machine and during work.
- Do not use the machine in environments that are not protected against lightning.



2.10 WARRANTY

Unless otherwise specified in the Order Confirmation, the warranty terms and conditions are set as follows:

Object of the Warranty

The **Manufacturer** guarantees the good quality and construction of the machine and, during the specified warranty period, undertakes to repair or replace free of charge, any broken or prematurely worn parts, if such faults are due to poor quality of the materials used, manufacturing defects or imperfect assembly.

The warranty does not cover those parts that are found to be broken or worn due to:

- Failure to comply with the instructions contained in the Use and Maintenance Manual.
- Lack of or incorrect maintenance.
- Lack of or incorrect cleaning of all the machine parts that require regular cleaning.
- User negligence related to level control, filters cleaning, auxiliary services, power supply.
- Use of unsuitable tools for routine and extraordinary maintenance.
- Modifications or tampering by the user or third parties carried out without the specific permission of the **Manufacturer**.
- Use of non-original spare parts.

2.11 WARRANTY DURATION

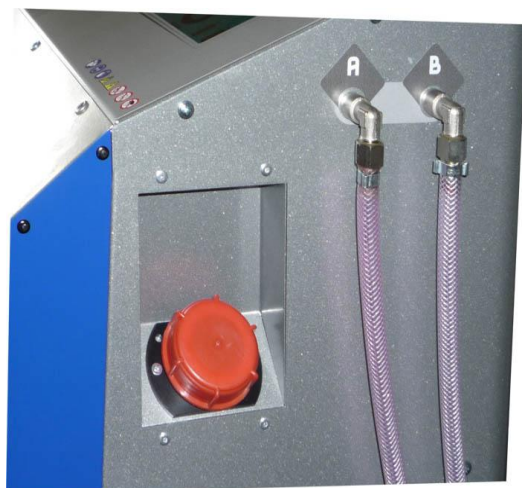
For the warranty terms, please refer to the contract.

3 MACHINE DESCRIPTION

3.1 OPERATING PRINCIPLE

The machine referred to in this manual was designed and built to recover and recycle the refrigerant fluids present in the vehicle's A/C system, in a single series of operations, without any leakage into the environment.

3.2 STATION COMPONENTS

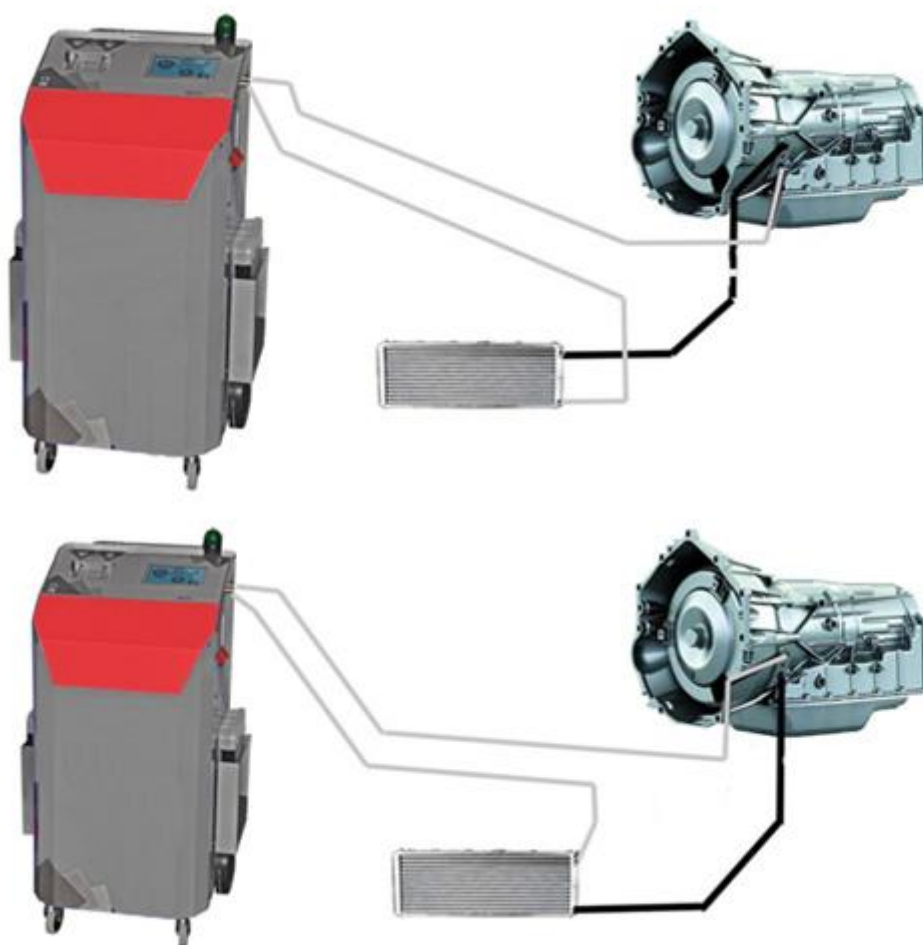


4 OPERATION AND USE

PREPARATION:

- 1) Identify on the vehicle the hose that carries the oil from the gearbox to the radiator.
- 2) Disconnect the hose from the gearbox.
- 3) Connect the AGA-PRO hoses to the gearbox (the direction is not relevant).

FIGURE 1



5 AUTOMATIC CYCLE

Turn on the station



Select AUTOMATIC



If oil is detected in the tanks, a window appears that allows us to return to the main menu (HOME), to then reset the value read in the tanks, or to continue the automatic cycle (CONTINUED)



Select the operations to be carried out in the automatic cycle press (START)



Enter the total amount of oil contained in the gearbox and press (DONE)



Pour the washing additive into the special bottle and press (DONE)



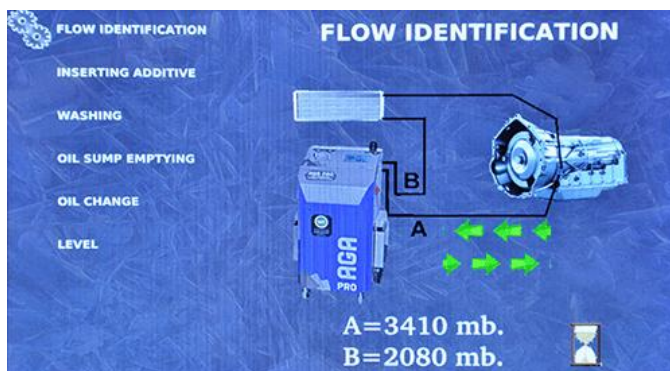
Pour new oil until the bar (A) turns green. and press (DONE)



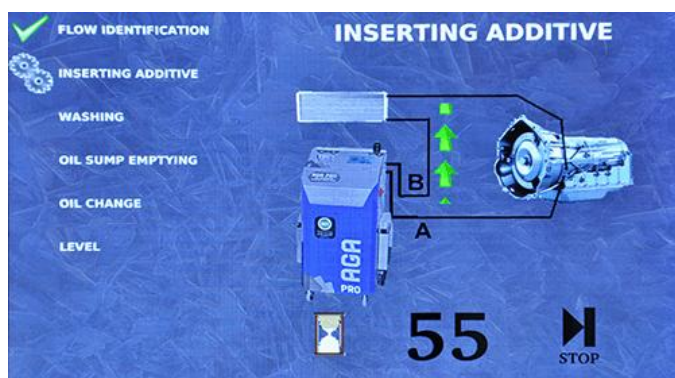
The machine is ready to start the cycle!
Press (START CYCLE) to start the operations

6 CYCLE EXECUTION

During the cycle, observe the green light above the station;
when the light turns on, switch the vehicle's engine on and
when it turns off, switch the engine off.



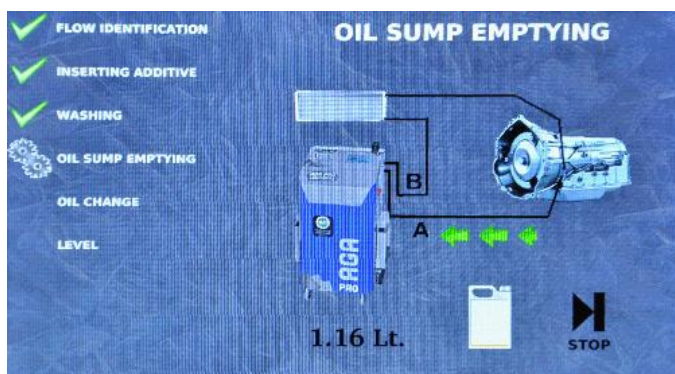
As a first operation, the machine will identify the direction in which the oil circulates. A and B indicate the pressure of the oil in the two hoses. The hose with the higher pressure carries the oil from the gearbox to the station.



After identifying the flow, the machine will introduce the washing additive previously poured into the special bottle.

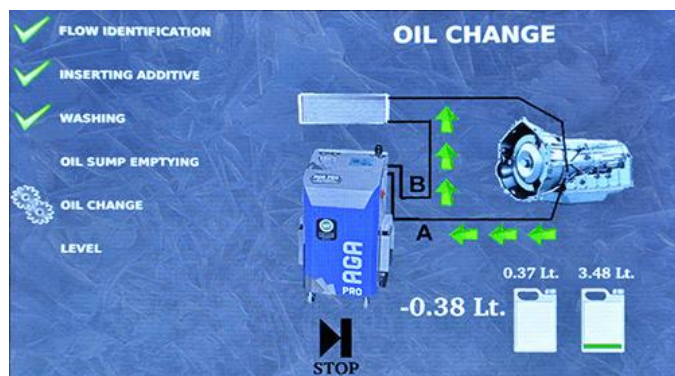


The machine starts the washing cycle, that will last for 10 minutes.



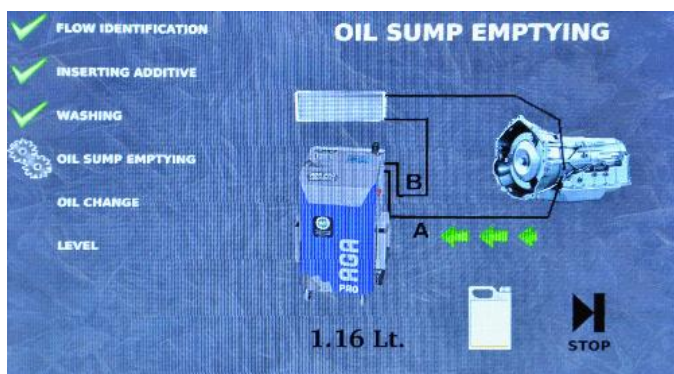
If the cup emptying function has been selected, the machine will proceed to this phase.

Switch the engine off as soon as the green light turns off or as soon as you observe any bubbles in the used oil.



The oil change begins; stay inside the vehicle during this phase and switch the engine on and off as indicated by the green light.

The cycle ends when the light starts to flash.



Now you can check the level, switch the vehicle on and bring the oil to the control temperature.

If you need to add some more oil to reach the level, pour the oil into the additive bottle and press the relevant button to introduce it into the vehicle

The oil change is now complete and you can restore the vehicle's circuit.

7 EXTRA FUNCTIONS MANUAL



You can use this function to carry out each operation individually

MENU



Select the MENU to set the station and any particular functions



- **DATE AND TIME:** To set the clock.
- **RESET:** to reset the scales if the tanks are empty but the oil indicator shows a value different from 0 (make sure the tanks are empty before performing this operation)
- **EMPTYING:** to empty the tanks from any residual oil at the end of the work cycle
- **CONFIGURATION:** to configure the station after entering the appropriate password (reserved for authorised technicians)
- **CALIBRATION:** to calibrate the scales after entering the appropriate password (reserved for authorised technicians)
- **FILM:** from here you can view the tutorial video;
- **LANGUAGE:** to change the language

8 TROUBLESHOOTING:

PROBLEM	REMEDY
General Problems	
The machine does not work, the main switch does not light up	Check the line fuse (the one installed in the input socket)
	Check the power wire
	Replace the main switch
At start-up, only the main switch lights up, the display remains off	Replace the main switch
	Replace the display *
	Replace Power Supply
	Replace CPU board *
Engine on / off indicator does not work	Replace bulb
	Replace Relay card
The machine works but does not accept any keyboard commands	Replace display card *
	Replace display connection cable *
	Replace CPU board *
Weighing and Pressure Problems	
When entering the oil it does not indicate the weight	Check that the oil balance has no impediments
	Calibrate the scale
	Replace CPU board *
The flow is not detected	Check that the pressure switches are connected
	Recalibrate pressure switches
The engine warning light does not go out during the cup emptying	Check that the pressure switches are connected
	Recalibrate pressure switches
Increased pressure during the washing phase	
La pressione risulta superiore a 8 bar durante la fase di lavaggio	Replace filter (replace every 5 cycles)
Solenoid valve and pump problems	
No solenoid valve is activated during the cycle	Replace CPU board *
	Replace Relay card
	Replace the Cpu-Relay flat cable
The additive is not inserted	Replace solenoid valve 2 or 4
Flow is recognized incorrectly	Replace solenoid valve 1
During the change the oil does not come out of the gearbox	Replace solenoid valve 3
Pump does not work	Replace pump
The charging phase inserts more oil than the set one	Check that the oil balance is not impeded
	Replace solenoid valve 4*

9 MAINTENANCE



ALL MAINTENANCE OPERATIONS SHALL BE CARRIED OUT WITH THE MACHINE TURNED OFF.

9.1 NATURE AND FREQUENCY OF THE CHECKS AND MAINTENANCE WORKS

Respect the recommended maintenance intervals to keep the unit in good working order at all times.



FAILURE TO COMPLY WITH THE REQUIREMENTS ABOVE WILL RENDER THIS WARRANTY NULL AND VOID AND WILL RELIEVE THE MANUFACTURER OF ANY LIABILITY.

1 WEEK after putting the machine into service, check:

- The tightness of the screws;
- The tightness of the hoses;
- The pump oil level.

EVERY 6 MONTHS OR WHEN THE SERVICE REMINDER APPEARS check:

- The tightness of the screws;
- The tightness of the hoses;
- The condition of the connection hoses;
- The pump oil level;
- Replace the dehydrating filters;
- Check the scale calibration;
- The leakage.



ATTENTION! Do not disperse the lubricant into the environment; it is a special waste and must be disposed of in compliance with the regulations in force.



ATTENTION! Do not disperse the filter into the environment; it is a special waste and must be disposed of in compliance with the regulations in force.

9.2 EMPTYING THE EXHAUSTED OIL CONTAINER

When the oil level exceeds 200 ml, empty the exhausted oil container. Disconnect the used oil container very carefully, without pressing the scale. Loosen the container keeping the cap fixed and empty in an exhausted oil tank. Tighten the container keeping the cap fixed and put in back in its seat carefully, without pressing the scale. **N.B.** Do not pull or push the oil scale to avoid damaging it.

9.3 PRINTER PAPER ROLL CHANGE

Use thermal paper with the following specifications:

Paper width 58 mm

Maximum paper roll diameter 50mm

10 ADDITIONAL INSTRUCTIONS

10.1 DECOMMISSIONING AND DISMANTLING

According to Directive 2012/19/UE, the machine cannot be disposed of in the municipal waste stream, but it must be sent to a specialised separate WEEE (Waste Electrical and Electronic Equipment) collection and disposal centre or returned to the dealer if a new one is purchased. The law provides for penalties for those who release WEEE waste in the environment. If released into the environment or used improperly, WEEE waste can release substances hazardous to the environment and to human health.

10.2 BATTERY DISPOSAL

The machine uses an electronic board with Nickel-Metal Hydride (NiMH) battery; therefore, at the end of its service life, it must be removed by the expert personnel in charge of machine dismantling.

11 SPARE PARTS

11.1 GENERAL PROVISIONS

Use only ORIGINAL SPARE PARTS when replacing parts of the machine.

The use of non-original spare parts will render the warranty void and relieve the **Manufacturer** of any liability concerning the safety of the machine in case of any accidents.

The **Manufacturer** remains at the disposal of the Customer for any type of problem concerning the use and maintenance of the machine.

To order a spare part, please use the attached sheet, that must be completed in its entirety.

The list below shows the number that corresponds to the position of each piece on the attached drawing, the code and the description.

The orders (to be sent by fax or e-mail) must be addressed to:

OVERLANDER B.V.
Morseweg 2 3988 BP Zeewolde
ph. +31 36 5219200 - fax. +31 36 5219209
info@overlander.nl

11.2 SPARE PARTS REQUEST FORM

On the next page, you can find the spare parts request form.

In case of spare parts request or spare parts quotation request, please make a photocopy of the form and fill it out in its entirety.

Filling out this form in its entirety is essential in getting a prompt response from the Technical Support Centre **of the Manufacturer**.

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11.3 SPARE PARTS LIST

CODE	DESCRIPTION
AG1301	Pressure gauge
AG1302	Clearance
AG1303	Washing filter
AG1304	Additive bottle
AG1305	Relay board
AG1306	LCD Display
AG1307	Engine lamp
AG1308	CPU board
AG1309	Switch
AG1310	Power plug
AG1311	Power supply
AG1312	NR valve
AG1313	Pressure transducer
AG1314	Solenoid
AG1315	Used oil cylinder
AG1316	Used oil tank
AG1317	New oil tank
AG1318	Load cell
AG1319	Wheel D = 200
AG1320	Swivel wheel
AG1321	Pump

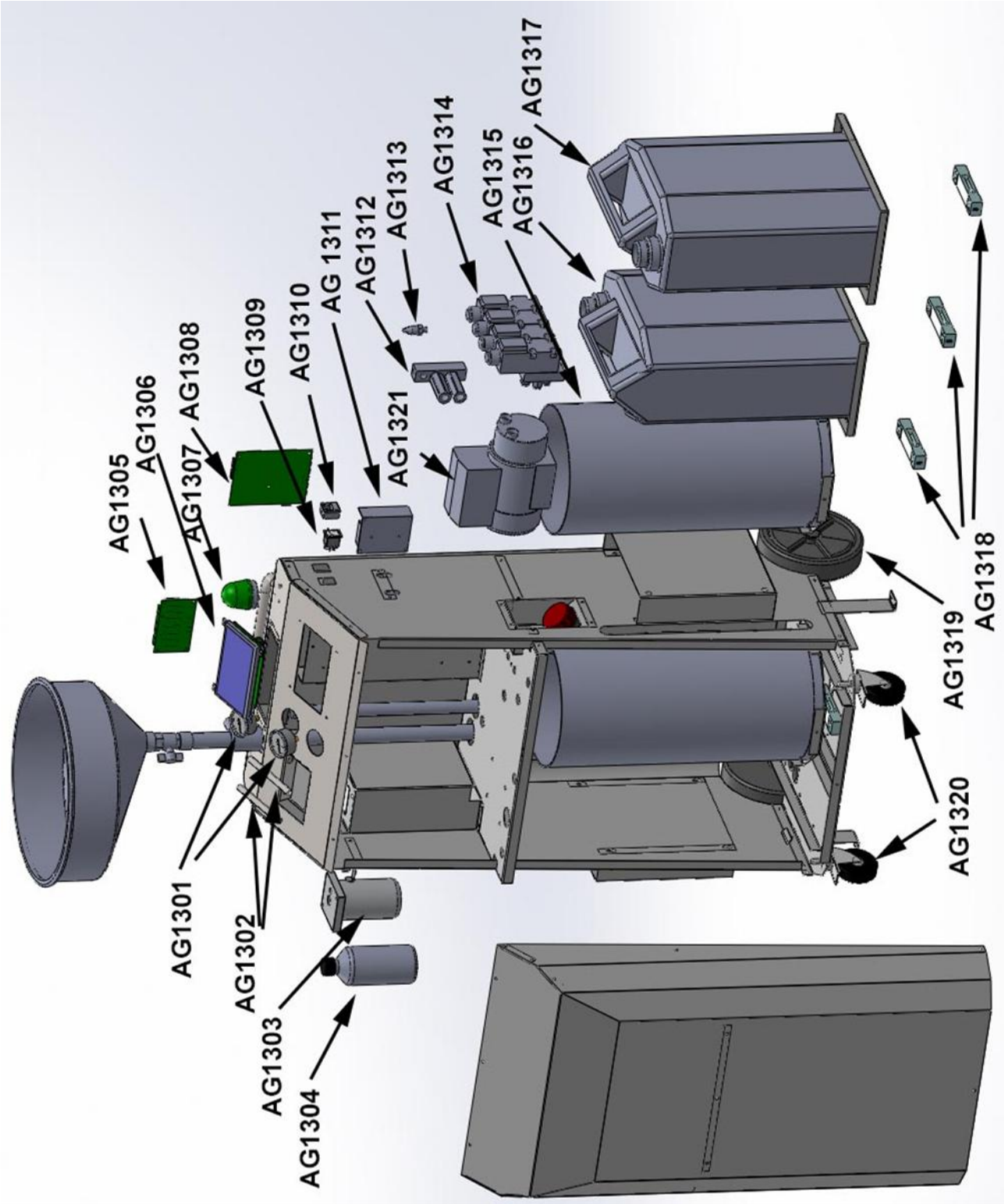


IMAGEN	CÓDIGO	MARCA	CAMBIOS
	ST1	BMW,VOLVO,AUDI,RENAULT, SAAB,FORD	09D; 0C8; AF33-5; AF40;AISIN TR60-SN; 09E AW55-50SN;TR-60SN;722.9; ZF6HP
	ST2	BMW, AUDI,RENAULT, SAAB FORD, RANGE ROVER JAGUAR	09D; 0C8; AF33-5; AF40;AISIN TR60-SN; 09E AW55-50SN;TR-60SN;722.9; ZF6HP
	ST3	AUDI, VOLKSWAGEN, JEEP	ZF5HP; 0B5; 09L; 0AW;A500; 01V
	ST4	JEEP, FIAT, CHRYSLER MERCEDES-BENZ, MITSUBISHI	4L60E; 4L65E; 41TE; 41AE; 62TE; WFC280; 5EAT
	ST5	AUDI, MERCEDES-BENZ, MITSUBISHI	R4A51; V4A51; V5A51; 42RE; 44RE; 45RFE; 5-45RFE; 722.6; 722.9
	ST6	UNIVERSAL	DIPSTICK
	ST7	JAGUAR, MERCEDES-BENZ, SSANGYONG	722.6; 722.3; 722.4; 722.7
	ST8	JAGUAR, MERCEDES-BENZ, SSANGYONG, MITSUBISHI	722.6; 722.3; 722.4; 722.7
	ST9	JAGUAR, FORD, MAZDA	5R55E; 5R55S; 5R55N; 5R55W
	ST10	VOLKSWAGEN, AUDI, MITSUBISHI	O9E; O9L; ZF6HP
	ST11	VOLVO	VARIOUS
	ST12	UNIVERSAL MALE	
	ST13	JEEP	45RFE; 5-45RFE
	ST14	UNIVERSAL FEMALE	
	ST15	PEUGEOT; CITROEN;VW;FIAT DUCATO	ZF 4HP20

IMAGE	CODE	BRAND	GEAR
	OP16		AW55-50SN; AF40; TF-81SC; ZF5HP; 6L80; 6L90; TF-80SC; AF21; TF-80SD; AF40-6
		UNIVERSAL 90°	
	OP18	AUDI, BMW (8 SPEED), JAGUAR, LAND ROVER, ALFA ROMEO, JEEP, IVECO	ZF8HP45; ZF8HP50; ZF8HP55; ZF8HP55AF; ZF8HP65A; ZF8HP70; ZF8HP90; ZF8HP75H;
	OP18+	BMW	ZF GA8HP-45Z
	OP19	AUDI, VOLKSWAGEN; PORSCHE, LEXUS, MITSUBISHI	09G; TF-60SN; 09M; ZF5HP; TF-63SN
	OP20	AUDI (Q7/Q8), BMW	ZF8HP; 0B5; 0AW; 08HP
	OP21	MITSUBISHI PAJERO	R4A51; R5A51
	OP22	AUDI	VARIUS
	OP23	GM	VARIUS
	OP24	JEEP, DODGE, OPEL, GM	42RE; 44RE; 45RFE; A500; 5-45RFE
	OP25	JEEP, MITSUBISHI, GM, SUZUKI, TOYOTA	LANCIA THEMA (2012), FIAT CROMA, MERCEDES GLK 4 MATIC (2010), MERCEDES ML
	OP26	VOLVO XC60, V60	AISIN THERMOSTATIC VALVE; D5204D3 (2016), D5244T12(2014)

IMAGE	CODE	BRAND	GEAR
	SP27	AUDI, VOLKSWAGEN, SEAT, SKODA	DSG VW; DQ250 (02E); DQ500 (0BH)
	SP28	JEEP, FIAT, ALFA ROMEO, OPEL, CITROEN	AF33-5;09G; 09M; TF-80-SC (AF40); TF-80SD (AF40)
	SP29	RENAULT; MITSUBISHI, NISSAN	JF613E; RE0F06A
	SP30	NISSAN, MITSUBISHI, JEEP, DODGE	JACTO
	SP31	FIAT, JEEP, LAND ROVER	ZF09HP
	SP32	MERCEDES BENZ, RENAULT	DSG MERCEDES, K7A240; K7A350; K7X350; 7DCT300
	SP33	FORD, RENAULT, PEUGEOT, VOLVO	POWERSHIFT, 6DCT259;6DCT450/WD;6DCT451;DD
	SP34	TOYOTA, SUZUKI, MAZDA	K410; K411
	SP35	FIA, CITROEN, PEUGEOT, RENAULT	AL4; DP0
	SP36	RENAULT	LAGUNA III (B91, D91, K91)
	SP37	MERCEDES	LEVEL STICK

IMAGE	CODE	BRAND	GEAR
	SP38	MERCEDES BENZ (CLK,C,AMG)	722.6 (5 SPEED)
	SP39	CITROEN, PEUGEOT	BH01 (2016)AT6, BH01(2015)AT6
	SP40	GM, FIAT, FORD, JEEP, CHRYSLER SAAB, MER- CEDES	CHRYSLER GRAND VOYAGER, MERCEDES ML 642940(2006)
	SP41	BMW, JAGUAR	JAGUAR S-TYPE FC (1999)
	SP42	GM	DODGE RAM (2017)
	SP43	VOLVO, MINI,, BMW	AISIN, AWF8F45 (TG-81LS)
	SP44	VOLVO (C70, S60, S70, S80, V70, XC70, XC90) (1999-2011)	AW50-42; AW55-50/51SN; AW50/51 AWD; AW42 AWD; TF-80SC (AWD); 4T65EV(-GT)
	SP45	MERCEDES BENZ	7G-TRONIC 722.9
	SP46	PEUGEOT	EAT8



DICHIARAZIONE DI CONFORMITÀ
DECLARATION OF CONFORMITY
KONFORMITÄTSERKLÄRUNG
DÉCLARATION DE CONFORMITÉ
DECLARACIÓN DE CONFORMIDAD



W.T.Engineering S.r.l.
via Ugo Foscolo, 96/F 24024 Gandino (BG) - Italy
Telephone 035/733399 Fax 035/7172834
(Manufacturer at the premises of whom is compiled and stored the Technical File)

DECLARES UNDER SOLE RESPONSIBILITY THAT THE NEW MACHINE:

AGA PRO	SERIAL NO.:	YEAR OF CONSTRUCTION:
		2025

COMPLIES WITH THE FOLLOWING DIRECTIVES:

Machinery Directive 2006/42/CE
Directive 2014/35/UE and Subsequent Amendments
Directive 2014/30/UE and Subsequent Amendments

Gandino, 10/01/2025

The Legal Representative
Claudio Peroni



W.T.Engineering S.r.l.

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