

ATF-8100

Auto transmission flush machine



User Manual

All rights reserved! Without the written permission of the company, no company or individual may copy and backup this manual in any form (electronic, mechanical, photocopying, recording, or other forms). This manual is designed for the use of the company's products. The company does not assume any responsibility for the consequences of using it to guide the operation of other machine.

The company shall not assume any responsibility for the cost and expense due to the damage or loss of the machine caused by: accident caused by any personal or third-party; the misuse or improper use of the machine; the unauthorized modification or repair of the machine; operation and maintenance that do not follow the instruction of the user manual.

For the damage of the machine caused by use of other optional accessories or consumables instead of the company's original products or products approved by the company, the company shall not assume any responsibility.

Official statement:

Only the professional technician or maintenance personnel can operate this machine. Read and understand this manual thoroughly before use the machine.

Cautions



Important Safety Instructions

In order to use the machine correctly please read this manual carefully before using the machine.

Do not smoke near the machine while the machine is in use.

Do not use the machine near heat and fire sources.

This machine can only be used indoor and avoid exposing the machine to sunlight or rain.

Turn off the machine after finishing working.

When operate the machine, notice that the hose should be away from the rotating parts and heating parts of the vehicle, such as fans and radiators.

vehicle exhaust contains a variety of toxic and harmful gases (such as carbon monoxide, hydrocarbons, nitrogen oxides, etc.), therefore, please maintain good indoor ventilation during operation, and please wear protective glasses, protective masks, and wear protective clothing.

The temperature of parts such as the exhaust pipe and water tank of the automobile engine is high, and the operator should keep away from the heat-generating parts to prevent burns.

When disconnecting the oil line connector, use a towel to cover the connector to prevent the automatic transmission oil from splashing.

Do not let children or mentally handicapped persons get close to or touch the machine while it is in operation.

The user of this machine must be skilled in the shifting of the automatic transmission to prevent damage to the transmission in case of operating mistakenly.

The machine should be placed straight up and please do not upside down or sideways

the machine.

When use the machine to change oil for the vehicle, the operator must monitor the running status of the machine in real time so as to avoid damage to the transmission caused by the malfunction of the machine.

When replace the automatic transmission oil, it must be operated by a professional operator. During operation, the professional operator must pay attention to the operation of the machine. The quality of the selected automatic transmission oil must meet the requirements stated in the operated vehicle's maintenance manual; otherwise, Shenzhen SHTD Technology Co., Ltd. shall not be liable for any direct or indirect liability for the loss caused by the unqualified oil.



Indicate the operation here has to pay attention when operating the machine.



Indicate the possibility of product damage or personal injury during operation.

Contents

1. General Introduction.....	4
2. Functional Characteristics of the Machine.....	4
3. Work Environment and Technical Indicators.....	5
4. Composition and Structure.....	6
5. Operation Notice.....	7
6. Operation Step.....	8
7. Maintenance.....	14

1、 General Introduction

According to the automatic transmission maintenance regulations, the oil of the automatic transmission should be replaced after the vehicle has run 20,000-40,000km... After the automatic transmission is used for a long time, the internal transmission oil will deteriorate. If the automatic transmission oil cannot be replaced in time, this will result in the automatic transmission works abnormally. The automatic transmission oil change machine on the market cannot accurately control the accuracy of equal exchange of the transmission oil in the process of changing the oil. Instead, the accuracy of equal exchange of the transmission oil is manually adjusted through the control of the inlet and outlet valves of the oil change machine. If the manual control is improper, the oil can be overfilled or inadequate which might cause damage to the gearbox. The automatic transmission failure caused by overfilling or underfilling of oil is common.

Our company has newly developed an automatic transmission intelligent oil change machine; this machine can automatically complete the high-precision cleaning and oil replacement of gearboxes, hydraulic torque converters and transmission radiators within 15 minutes. The oil change rate can approach 100%. The machine has improved its timeliness, as well as has improved its replacement and equal precision control capability to ensure the replacement quality of used oil and new oils in the automobile's automatic transmission. The machine operates the replacement process automatically, and it can identify the inlet and outlet direction of the automatic transmission oil automatically with humanized operation design. Our automatic transmission intelligent oil change machine is your capable assistant for maintain your automobile's automatic transmission

2、 Functional Characteristics of the Machine

Automatically identify the in/out direction of oil / intelligently transfer the in/out direction of oil of the automatic transmission

Automatically identify the positive and negative poles of the power supply.

High-precision automatic intelligent electronic control the equal exchange of new and used oil.

Automatic cyclic cleaning function.

Automatic filling of automatic transmission oil function.

Automatically reduce the automatic transmission oil function.

Visual display the radiator oil pressure of gearbox.

LCD display, user-friendly operation, convenient and practical.

The fifth-generation computer board with more stable performance.

One-touch calibration function of intelligent electronic scales.

One-touch zero-return function of intelligent electronic scale, avoid electronic scale error.

Special connectors suitable for different European, American, Asian automobiles.

Effectively solve the problem of incomplete replacement of transmission oil manually, improve the performance of the transmission, and extend the service life of the transmission.

3、Work Environment and Technical Indicators

Technical Parameters:

Environment temperature: -10~+40° C

Relative humidity: 85%

Technical Specifications:

Voltage: DC12V

Maximum power: 150W

Pressure gauge: 0~150psi

Outlet tube: 2.5m

Oil return tube: 2.5m

Filter accuracy: 5 μ m

Oil tank: 20L×2

Equal exchange tolerance: ± 100 g

Noise: <70db

Net weight: 50 Kg

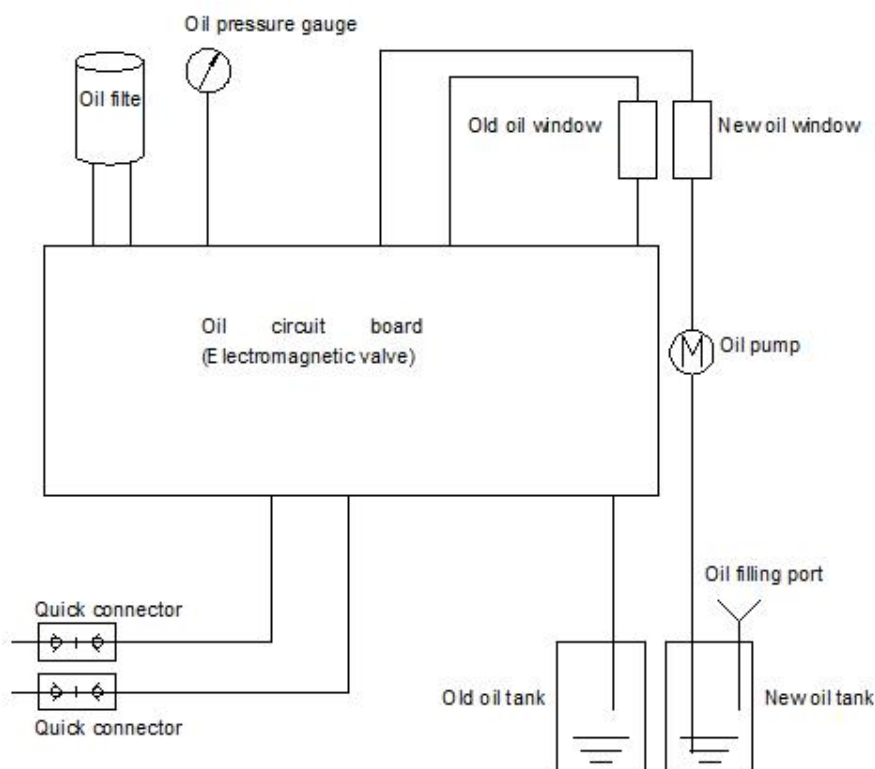
Gross weight: 70 Kg

4、Composition and Structure

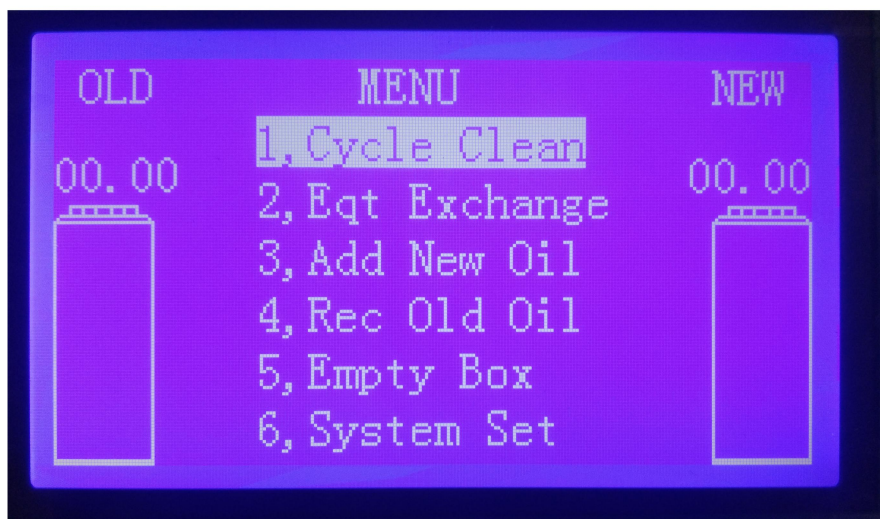
4.1. Appearance of the Machine

The ATF 8100 automatic transmission oil change machine is a cabinet structure with a handle on the top and casters on the bottom, which enable the machine being moved very conveniently. The oil pipe adopts with a quick connector and is easy to assemble and disassemble. The operation panel of the machine is very simple and clear, which makes it is easy to operate the machine.

4.2. Pipe Arrangement



4.3 Operation Channel



Menu	Function Description
1. Cyclic Clean	Clean the automatic transmission circularly
2. Eqt Exchange	Replace the automatic transmission oil equally
3. Add New Oil	Increase the amount of oil in the automatic transmission
4. Rec Old Oil	Reduce the amount of oil in the automatic transmission
5. Empty Box	Empty the new oil remaining in the machine
6. System Set	Modify system parameters, such as calibration of electronic scales and one-key calibration

5、Operation Notice

- 1) It is **PROHIBITED** to add automatic transmission oil or protective agent from the filler port when the machine is running.
- 2) The used oil tank and new oil tanks of the machine must **KEEP EMPTY** without any oil when the machine is kept for storage. After the machine completes its work, the used oil should be discharged to other containers or drained immediately.
- 3) When the machine is running, place the machine in a horizontal place to ensure that the machine will pump all the oil in the tank.
- 4) Except for emergency situations, please **DO NOT TURN OFF** the engine and restart the machine in the process of equal exchange of transmission oil. This is to prevent the restart of the engine from affecting the accuracy of equal exchange.
- 5) The professional operator must monitor the oil change process closely.

6、Operation Step

6.1. Preparation before change the oil

- 1) Lift the vehicle
- 2) Firstly, find the oil tube that is easy to disassemble and is connected the radiator and the automatic transmission and disassemble the oil tube from the vehicle; and then find a special connector that matches with the removed connector from the connector box (because the vehicle is updated all the time or the vehicle engine does not have enough position for different connectors, therefore, some vehicles cannot match with the machine connectors, and the connectors of the machine cannot match with each type of vehicle's connector 100%. Therefore, the user can DIY the connector or consult the company before use).
- 3) Connect the end of the inlet and outlet tubes on the machine to the two ends of the disassembled automatic transmission oil tube.

- 4) Clip the power cord clamp of this machine on the two electrodes of the vehicle battery.
- 5) Start the engine and confirm that the piping connections are reliable and leak-free.
- 6) Turn on the power switch of the machine and confirm that the power of the machine works normally.

6.2. Add New Oil

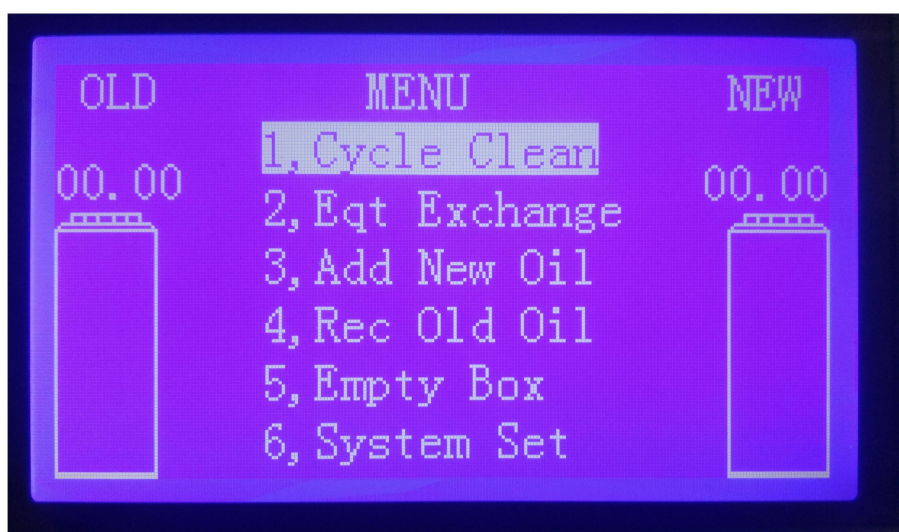
1) When filling transmission oil or protective agent to prepare the cyclic cleaning of the automatic transmission, confirm that the new oil tank is empty, and add appropriate amount of transmission oil or protective agent from the oil filling port.

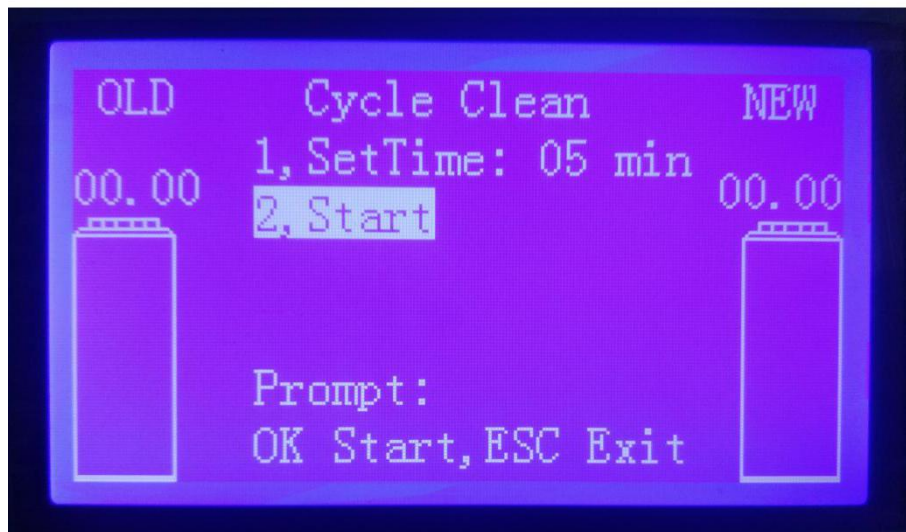
2) Fill automatic transmission oil

Before replacing the automatic transmission oil, add the prepared new oil to the new oil tank through the oil filling port.

6.3. Cycle Clean

1) Select “Cycle Clean” on the main menu, press the “OK” button, and set the cyclic cleaning time by using the “▲” and “▼” buttons.

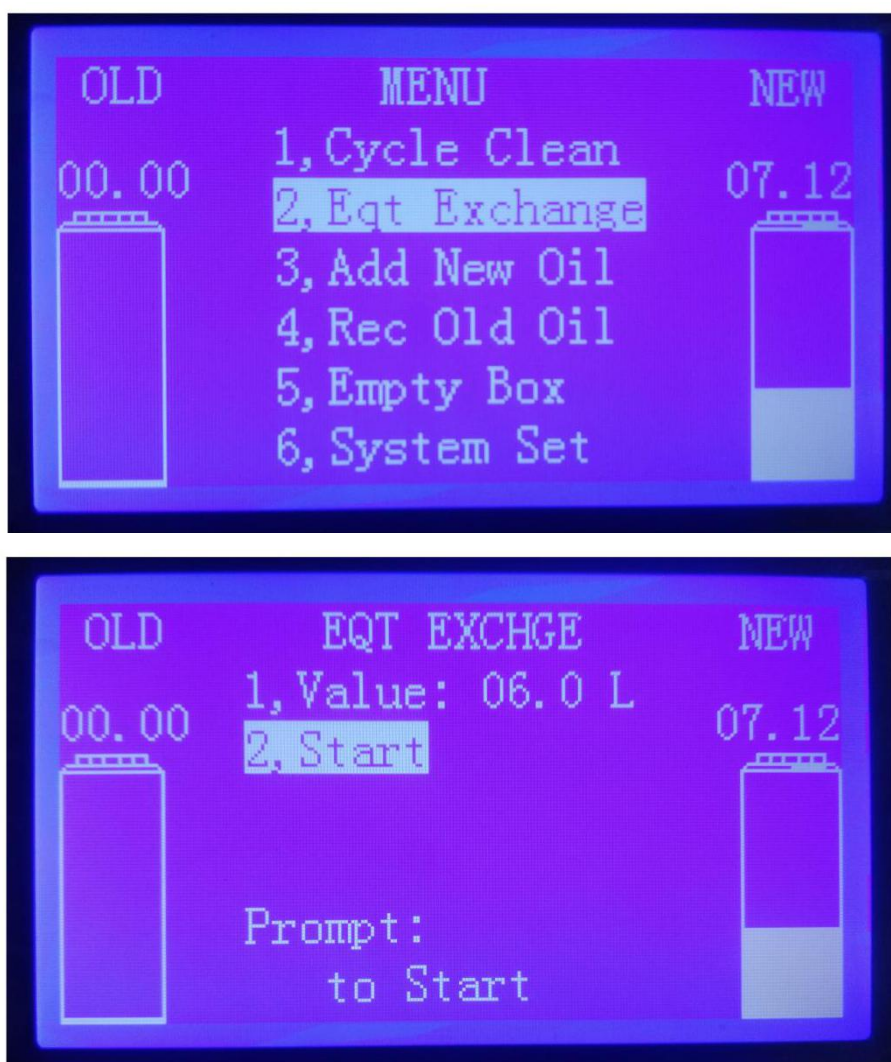




- 2) Start the vehicle.
- 3) Press "OK" button and save, select "Start" and press "OK" again to start cyclic cleaning. The impurities in the automatic transmission will be filtered through the filter in the process of cyclic cleaning. Shift between gears in the process of cyclic cleaning, each gear stops for 5-10 seconds, and finally stop the machine by shifting to the P gear. In order to speed up the cyclic cleaning, the use can lightly touch the accelerator to keep the engine 2500-3000 rev / min.
- 4) The machine will automatically stop after the set time has elapsed, or the cyclic cleaning can be stopped at any time by pressing the "OK" button during the cyclic cleaning process. After the cleaning is completed, the vehicle engine can be turned off.

6.4. Eqt Exchange

- 1) Add new automatic transmission oil to the machine.
- 2) Start the vehicle, automatic transmission heats the vehicle to normal oil temperature.



3) Select " Eqt Exchange " in the menu, use the "▲" and "▼" buttons to adjust the amount of transmission oil exchange, press "OK" to save, press "Start" button and start automatic transmission oil exchange.

4) When the exchange is completed, the buzzer will alarm and the LCD screen will display that the equal exchange is complete. If the used oil tank does not return oil within 40 seconds, the machine will automatically stop. Check the connection between the oil tube and the automatic transmission.

5) Although the machine can guarantee the high-accuracy for equal exchange, but since the oil level of the automatic transmission may not be in the normal range before the equal exchange, please check the transmission oil level after the completion of the equal exchange. If the transmission oil level is not within the scope of the standard and the oil level cannot be confirmed through the dipstick or oil observation hole (please refer to

automobile inspection guideline standard), then please use the function of increasing fuel quantity or decreasing fuel quantity to adjust the automatic transmission oil level to the standard oil level.

6) Check whether there is any leakage in the pipeline in the process of equal exchange.

7) Install the transmission heat tube to its position after the equal exchange is completed.

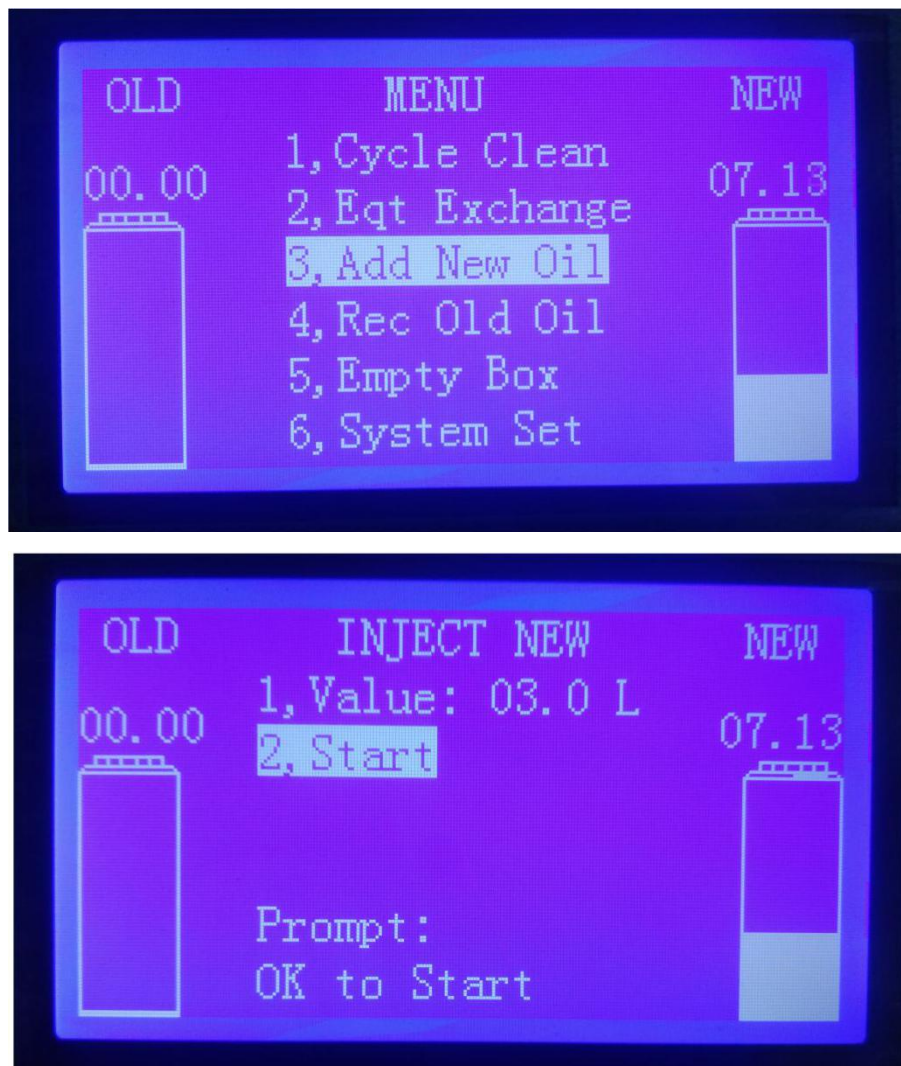
8) Shift between different gears according to the actual situation in the equal exchange process, each gear stops for 5-10 seconds. When would shift the vehicle to high gears, please step on the accelerator slight and speed up the vehicle to more than 60 km/h, and only under this circumstance, the automatic transmission oil of the high gear of the automatic transmission can be changed (after this process is completed, the ABS fault lamp of the vehicle equipped with the electronically controlled ABS may be turned on. This is because after the vehicle is lifted, the ABS wheel speed sensor of the driving wheel detects that the rotation speeds of two wheels are out of the normal range. This is a normal phenomenon. After the oil change is completed, the fault code can be cleared according to the normal erasing procedure if necessary).

9) In order to ensure equal exchange quality, the new oil in the machine should be 2-3L more than the total oil in the vehicle transmission.

6.5. Increase Automatic Transmission Oil Level

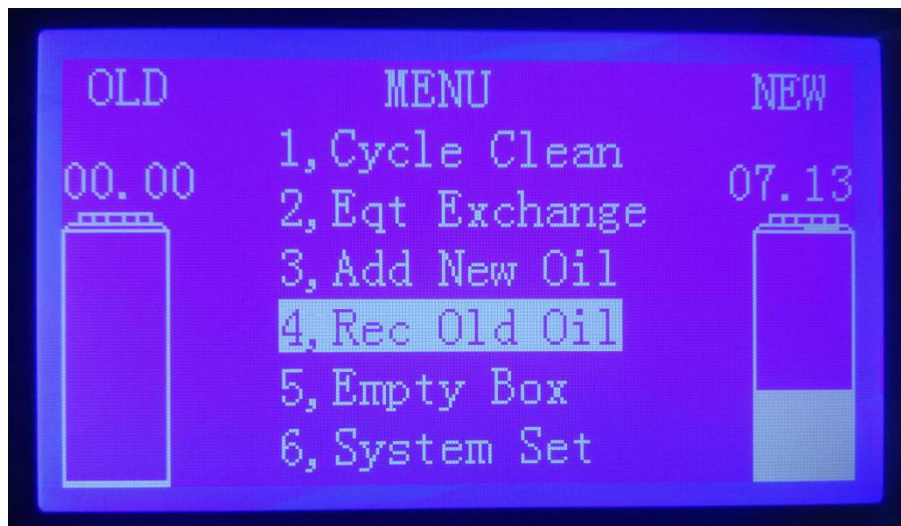
1) This operation can be selected when it is necessary to increase the automatic transmission oil level or to refuel the transmission.

2) Select the “Add New Oil” function, press the “OK” key to enter the new oil filling operation interface, set the filling amount by using the “▲” and “▼” buttons, press the “OK” button to save, and select “Start” to add new oil to the automatic transmission.



6.6. Reduce Automatic Transmission Oil Level

(This operation can be selected if the amount of automatic transmission oil is more than the standard during the inspection and would like to reduce the amount of oil in the transmission or reduce the transmission oil level)



Select “ Rec Old Oil” in the main menu, set the pump amount with “▲” and “▼” buttons, and select “Start” and press “OK” to run to make the transmission oil level drop.

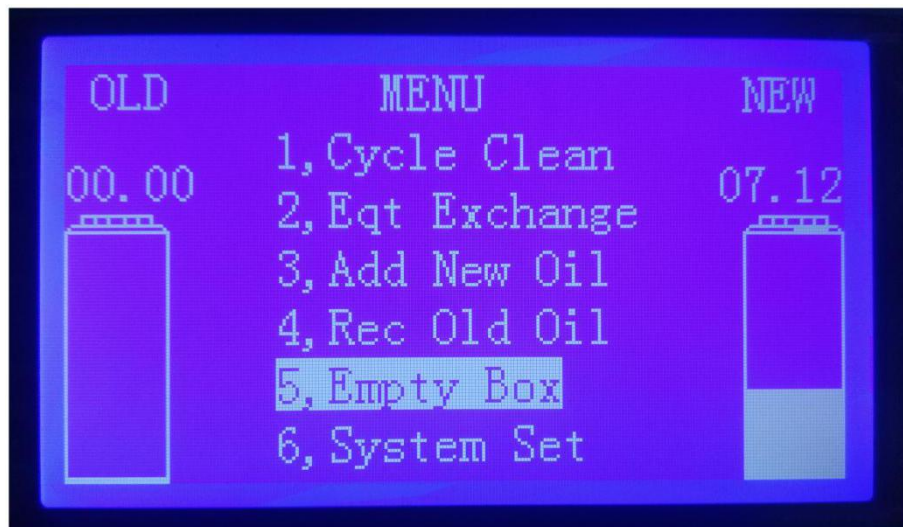


6.7. End of Oil Change

Install the transmission heat tube to its position, start the engine and check the vehicle pipeline for confirmation of oil leakage, check the automatic transmission.

6.8. Empty Oil of the machine

1) Select “Empty Box” in the menu and press "OK" to select used oil tank and new oil tank for emptying.

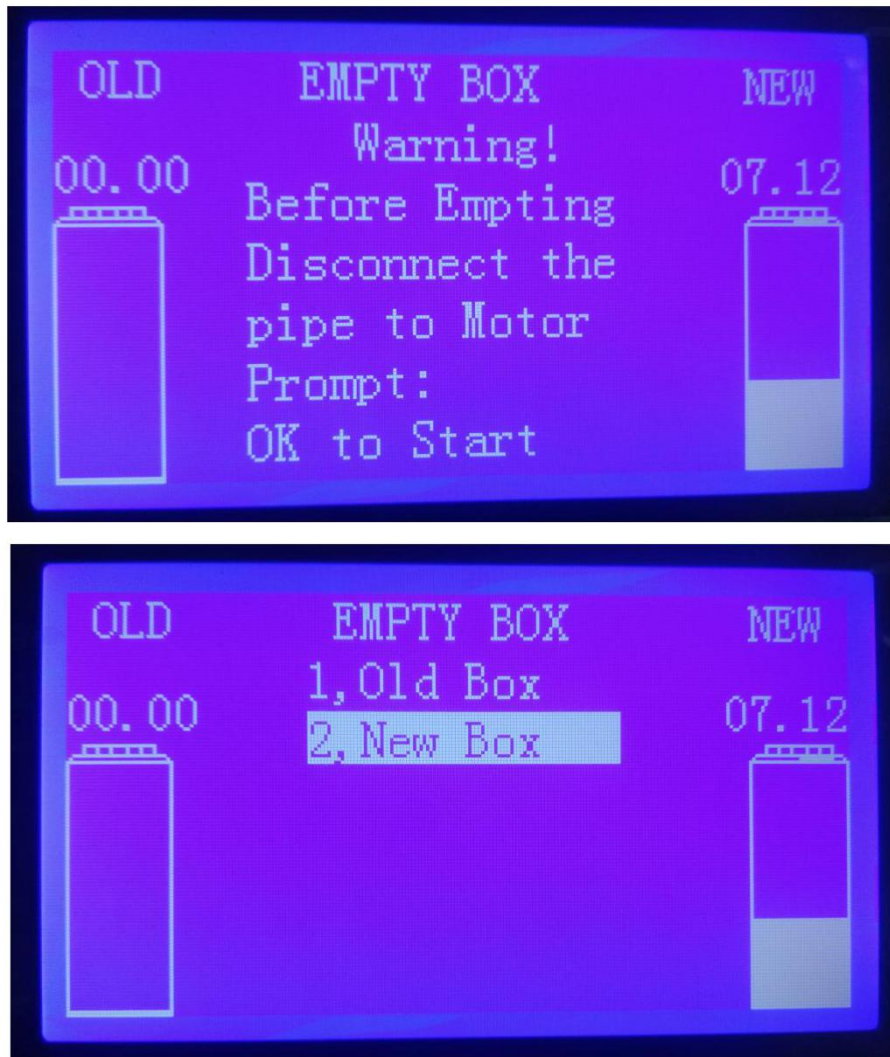


2) Please check again before emptying the tank. The following two points must be noted

① It must disconnect the connection with the automatic transmission;



② Be sure to insert a small connector (arbitrary shape) on any of the two quick connectors, and only under this circumstance, the quick connector can be opened and the used oil and new oil can be discharged. Otherwise, THE OIL TUBE WILL BURST. Please note.



3) Use the “▲” and “▼” buttons to select emptying the used oil tank or emptying the new oil tank. Press the “OK” button to run. Please prepare containers for keeping used oil before running.

7、Maintenance

7.1. Cautions

- 1) Please confirm that whether there is any leakage of the connections when changing the oil.
- 2) The waste oil in the used oil tank of the machine should be discharged in time after each operation. The new oil should be discharged from the machine and stored in the container, so as to protect the electronic scale under no-load conditions.
- 3) Keep and ensure that the new oil tank is clean.
- 4) If the automatic transmission needs to be cleaned, please use the recommended cleaning agent to avoid damaging the oil valves, rubber seals, etc. in the transmission.

7.2. Critical Component Failure Judgment

- 1) electromagnetic: if the electromagnetic valve is energized, the electromagnetic valve will act; if the electromagnetic valve is energized but not act, then it can judge that the electromagnetic valve might be damaged.
- 2) Oil pump: when the oil pump is energized, the oil pump will act, but if the oil pump do not rotate or suck oil, then it can judge that the oil pump might be damaged.
- 3) Circuit failure: no display, no operation, please check the circuit or the computer board so as to find out the problem.
- 4) Electronic scale: display the electronic scale's failure or the electronic scale has no response.

7.3. Warranty Terms

- 1) The whole machine is guaranteed for 1 year from the date of purchase.
- 2) Lifetime maintenance, the manufacturer only charges the repair cost for product that is beyond the warranty period.
- 3) The warranty promised by the manufacturer refers to the performance failure that occurs in the normal use condition according to the requirements. If there is a failure caused by man-made or other improper operation, the manufacturer has the right not to provide the warranty.