# OPERATION MANUAL



# **DESCRIPTION : AUTOMATIC ATF CHANGER**

# **MODEL : IMPACT-350 AUTO**

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AUTOMATIC ATF CHANGER
IMPACT-350 Auto
Micon control fully automatic
220 volt , 50 / 60 hz
Electric motor + trocoid pump
Flow meter scale
Max. 7 liter / min. Normal 3.5 liter / min.
Located in inside of machine
Estimately 10-20 min. to complete change
Circulation time is controllable, basic 30 second
Connecting to the line ( no direction )
40 liter x 1 each for waste storage inside
20 liter jar / can use any empty ATF jar
2.0 meter
Standard
50 x 56 x 115 cm
Approximate 52 kg

# SPECIFICATION

<u>REMARK</u> : System will run by automatically, if give any shock, machine may damaged because of sensitive flow meter scale.

if not showing precise amount change, need to change Filter which located in inside of machine (Filter is to protect flow meter sensor)

# AUTOMATIC ATF CHANGER

The purpose of the Automatic ATF changer !

A vehicle gains higher mileage over time, there is a build up of contaminating substances such as carbon deposit & oil sludge from the various humidity with in

the fluid.

As these particles & sludge get interrupt fluid passing. In this time, starting to combine sludge and particles to change the bigger and bigger oil particles, Then, those combined particles shall be accumulated into the oil cooler, it cause the increase of fluid temperature.

Nowdays, Automatic transmission's engineering is seriously sensitive and furthermore many of the cars are not installed oil level gauge,

To meet the car engineering specifications are required to precise measurement of transmission fluid to maintain the system in good working order.

# **DIRECTION FOR RIGHT LINE CONNECTION**

Machine will control right Liquid flow direction automatically and mechanically Therefore, customer connect any direction



FRONT PANEL

#### FLUID FLOW DISPLAY / 3 glass tube

1<sup>st</sup> glass will show waste sample, push top button while circulation, just second Then waste will come to this tube and store for before + after comparison
2<sup>nd</sup> glass is for New fluid color
3<sup>rd</sup> glass is for waste fluid color

#### PRESSURE GAUGE

Fluid Circulation pressure will show transmission's circulation pressure. but Each car's circulation pressure are different ( from 1 bar upto 5.5 bar )

### **CONTROL PANEL display**



- \* Exchange amount : Indicate customer's required amount, basically 8 liter
   Can change by ▲ up or ▼ down for required amount, then engine run
- \* New fluid amount : It show present changed amount for new fluid
- \* Waste amount : It show the amount which recovery from the transmission
- \* LED display : Present operation per each step

Circulation – Waste recovery –New fluid filling + Temp.

- Temp (  $^{\circ}\!\!\!C$  ) will show transmission oil temp. while circulation only

# CONTROIL PANEL's program change method ( if want )

- Circulation time change method : Basically set 30 second for all circulation Process, if want to change to longer time for more mix or circulation, such as 50 second, or less time, such as 20 second, can change by this program it's process ; During Push Continue work button , then main switch ON
  - Display shown " 1 CIRCLE TIME " and data 0030 For set required second, use up and down ▲ ▼ button and Main switch OFF, automatically set memory its required second.

# **CONNECTING WORK**



Internationally normal ATF changing process is CONNECTING WORK. It means that connect machine two line to any of oil cooler line and then connect in and out hose with direction and then ready to operation.

## The process is

Switch On and engine start under transmission's "P" position, then transmission fluid will flow from the transmission ->machine -> transmission for the circulation process

Then push START/STOP button , ATF changing process will go further Circulation first -> waste recovery (1.5 liter)-> new fluid filling (1.5), then circulation (about 30 second or any set second) for well mix + dilute, and repeat to meet required amount

When reach to required amount, Sound Buzzer will on and circulation again Then, engine off and machine switch off and connection line disconnect.

Total change work time is about 5-15 minutes, depends on circulation time

### **CONTINUE WORK**



Customer is possible to choice this option, If want to

- Save time , waste recovery and new fluid fill are work at same time Without circulation process, So, it will be done within a few minutes,
- Japan like this process
- Process are same as above
   Switch On -> CONTINUE WORK light on -> Engine start in P position -> START/STOP

**Remark :** After complete changed fluid, but car is still running and fluid is flow from the Transmission -> machine-> transmission by automatically

## Remark : New fluid fill function without line connection

Push Waste discharge -> Push  $\blacktriangle$ , then new fluid will continue to flow from the Any hose of line , when finish, push START/STOP button

#### Waste discharge process



For the stored waste discharge from tank

Switch On -> push Waste discharge button -> push START/STOP button Then outer 2 hose will flow out its waste fluid from the machine's waste tank In this time, need to connect any coupler to hose end for open and flow.

#### **BASIC PREPARATION**

- \* Connect 220 volt / 50-60 hz , single phase
- \* Insert 20 liter steel can into the new fluid loading pot with suction pipe
- \* Discharge all of waste fluid from the tank
- \* Proper adapters must be prepared

#### Caution

- 1) Transmission fluid change work must be engine run condition under the P lever of auto transmission
- 2) Recommend changing fluid amount : Normal car 8 liter, Bad condition , may need more volume, depends on Transmission condition.

(Need to drive over 30-40 km to provide transmission ECU study time)