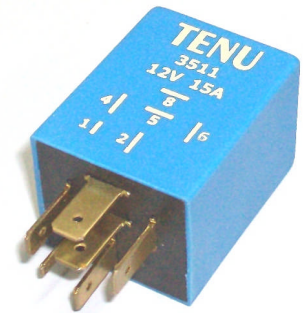


Wiper relays operate with a fixed interval in intermittent mode. However, this fixed interval is often too short or long due to vehicle speed and varying weather conditions, which imposes operating the wipers manually every time the windscreen is covered with water drops.

TENU Programmable Wiper Relay enables the driver to easily program wiper intervals using the wiper lever and removes the need for manual operation. The electrical connections of the device are compatible with Bosch-standard 6-terminal wiper relays, making it directly replaceable with wiper relays on most passenger vehicles.

Continuous operation of wipers is independent of wiper relay.



Features

- 0 to 60 seconds programmable wiper interval
- Default 6 seconds fixed interval without programming
- 3 successive wiper operations after windscreen washer operation (wipe-wash)

Default Intermittent Operation

When the wiper lever is brought to intermittent position, wipers operate one time and stop. If the lever is left in the same position, wipers keep running with 6 seconds intervals. If intermittent operation is switched off and back on immediately, wipers start running again without delay.

Windscreen Washing

At any point of operation, if the windscreen washer is run, wipers run 3 times successively after windscreen washer button is released. Simultaneously, wiper interval is set to 6 seconds default value. (Program erase)

Programming Wiper Intervals

To enter programming mode;

- 1) Wiper lever should be in "Interval" position.
- 2) Wiper operation should be turned off while wipers are on the move.

Programming starts when these two conditions are met. The time interval until the wiper lever is brought to "Interval" position again is then recorded and set as the new interval time.

To program the device, switch wiper lever to "Interval" (Condition 1). Wipers will start running. Then switch lever back to "Off" *before* wipers are back in rest position (Condition 2). Wipers will run once and stop.

Wait as long as desired to start wipers and switch to "Interval" again. This waiting period has now been recorded and programmed as the new interval time. Wipers will run with this interval even when they are switched off and on again.

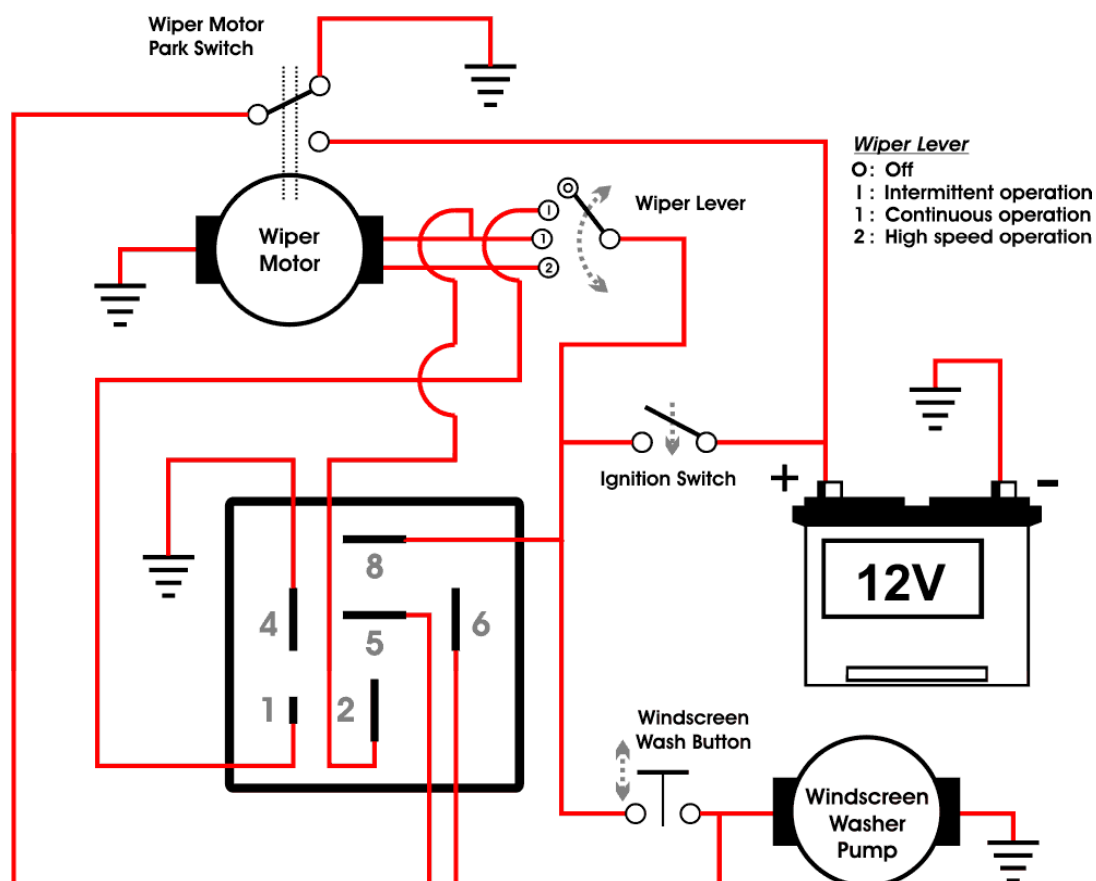
To change interval program, simply switch wipers off while wiper blades are on the move, wait as long as desired, and switch to "Interval" again.

- Interval time stays the same if wipers are switched off when they are at rest.
- Interval time stays the same if wipers are switched to or back from continuous operation.
- Pressing windscreen wash button sets wiper interval back to default 6 seconds.
- Switching Ignition off sets wiper interval back to default 6 seconds.

Electrical Connections

Term.	Equiv.		
1	I	+12V from wiper lever at intermittent position	0,80 x 2,80 male blade terminal
2	53M, 53e	+12V relay output to wiper motor winding	0,80 x 6,40 male blade terminal
4	31	Chassis, battery negative	0,80 x 6,40 male blade terminal
5	53S, 31b	12V positive or negative input from wiper motor park switch	0,80 x 6,40 male blade terminal
6	7, 53c	+12V from washer pump button	0,80 x 6,40 male blade terminal
8	15	+12V from ignition switch	0,80 x 6,40 male blade terminal

Connection Diagram



Operation Conditions

	Minimum	Average	Maximum	Unit
Voltage	10	-	15	V
Current output	-	-	15	A
Temperature	-30	-	85	°C
Default interval	-	6	-	Seconds

Dimensions (mm)

