660H5–01

SYSTEM DESCRIPTION

1. WASHER LINKED OPERATION

(a) This system operates the front wipers at low speed immediately after a jet of washer fluid when the front washer switch is on for 0.3 second or more. The system operates the front wipers at low speed for approximately 2.2 seconds and then stops operation when the washer switch is on for 1.5 seconds or more.

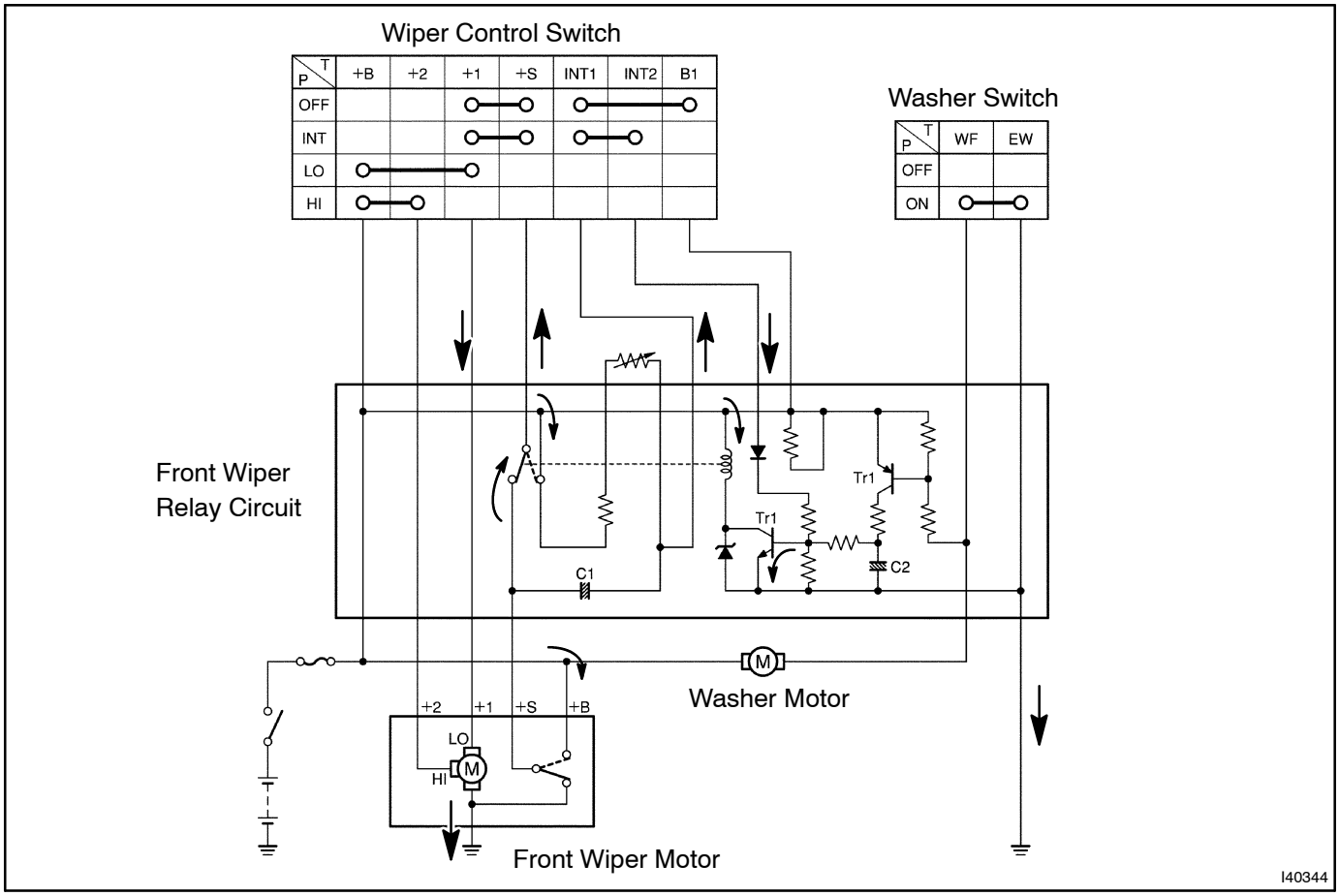
2. INTERMITTENT OPERATION

(a) The system operates the front wipers once in approximately 1.6 to 10.7 seconds when the front wiper switch is turned to the INT position. The intermittent time can be adjusted from 1.6 to 10.7 seconds by using the intermittent time adjust dial.

(b) If the wiper control switch is turned to the INT position, current flows from the already charged capacitor C1 through terminals INT1 and INT2 of the wiper control switch, to Tr1 (transistor). When Tr1 turns on, current flows from terminal +S of the wiper control switch to terminal +1 of the wiper control switch, to terminal +1 of the wiper motor, to the wiper motor and finally to ground, causing the wiper motor to operate. At the same time, current flows from capacitor C1 to terminal INT1 of the wiper control switch and then INT2. When the current flow from capacitor C1 ends, Tr1 turns off to stop the relay contact point and halt the wiper motor.

When the relay contact point turns off, capacitor C1 begins to charge again and Tr1 remains off until charging has been completed. This period corresponds to the intermittent time. When capacitor C1 is fully charged, Tr1 turns on and then the relay contact point turns on, causing the motor to operate again. This cycle is the intermittent operation.

The intermittent time can be adjusted by using the intermittent time adjust dial (variable resistor) to change the charge time of capacitor C1.



3. REAR WIPER INTERMITTENT OPERATION

(a) When the rear wiper control switch is turned to the INT position, current flows from the capacitor of the intermittent operation control circuit to turn on Tr. Current flows from terminal +B of the rear wiper relay, to relay coil, to Tr, to terminal C1 of the rear wiper relay, to terminal C1R of the rear wiper control switch and finally to ground, causing the relay contact point to turn on.

When the relay contact point turns on, current flows from terminal +B of the rear wiper relay to the relay contact point, to terminal LM of the rear wiper relay, to terminal +1 of the rear wiper motor, to the rear wiper motor and finally to ground, causing the rear wiper motor to operate.

Tr turns off immediately after the rear wiper motor operation as the current flow from capacitor ends, causing the relay contact point to turn off.

Even when the relay contact point turns off, current flows from terminal +B of the rear wiper motor, to the relay contact point in the rear wiper motor, to terminal S of the rear wiper motor, to terminal SM of the rear wiper relay, to the contact point of the rear wiper relay, to terminal LM of the rear wiper motor, to terminal +1 of the rear wiper motor and finally to ground until the rear wiper motor stops at the automatic stop position, causing the rear wiper motor to operate. Then the rear wiper motor stops at the automatic stop position as the relay contact point in the rear wiper motor turns off.

The capacitor in the intermittent operation control circuit is charged in approximately 12 seconds after the current flow ends. After the charge is completed, current starts flowing again to turn on Tr, causing the relay contact point to turn on.

This cycle (of current flow and charging) as described above is the intermittent operation.

