High Performance Electronic Components

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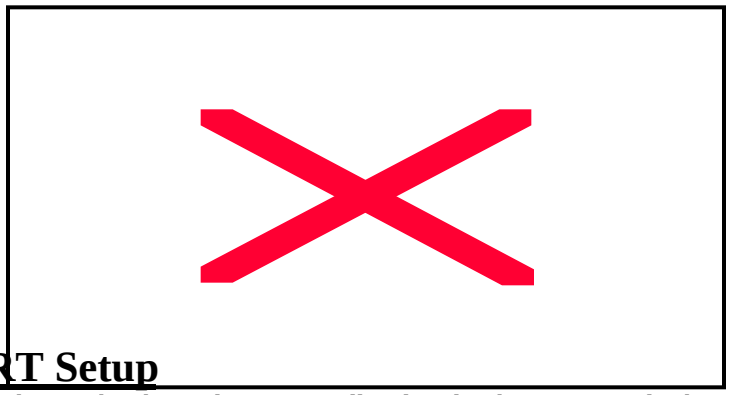
D.R.T.
Drivetrain Reaction Timer

INSTRUCTIONS

Installation of DRT

Keep all wires as far as possible from ignition coil.

1) Mount unit level in vehicle so that Display is facing up, DRT logo is facing toward front of vehicle, and Altronics logo and wiring harness is facing rear of vehicle.
2) Connect power and ground to terminals (Fuse with 0.5Amp fuse). Use #16 stranded wire.
3) Splice wire from transmission brake to the INPUT terminal. Use #16 stranded wire.
4) Run cable from drive shaft sensor head to unit and connect appropriate colors to terminal. (Only if drive shaft sensor equipped)



DRT Setup

The DRT is default setup for a Normally Open input button. This can be changed to a Normally Closed. The DRT can also be set to disable or enable the Drive Shaft sensor. The drive shaft sensor will be enabled by default if the unit was purchased with the drive shaft sensor. The DRT is factory set so that you will probably never need to change the following settings.

1) To enter the setup mode simply hold in the Reset button while applying power to the DRT, then release the Reset button.

2) The Display will first show the state of the Input switch: NORMALLY OPEN

3) If you want to change the state press the Reset button again and the Display should change to: NORMALLY CLOSED

4) If the Reset button is not pressed then the Display will show the state if the Drive Shaft Sensor: DrvShaft ENABLED

5) If you want to change the state press the Reset button again and the Display should change to: DrvShaft DISABLED

1) Now the DRT setup is complete.

DRT Operation

After power is applied the DRT will display greeting and then **TIMER READY!** message will appear. The system is ready at this point.

The system becomes armed when transmission brake button is **released; t**he **ARMED** message is displayed. At this point the system is waiting for the accelerometer to reach 0.8 G's and/or for the drive shaft to move. Once the configured inputs have tripped the message **PLEASE WAIT** will be displayed with a 15-second count down being shown. After 15 seconds the reaction times will be displayed:

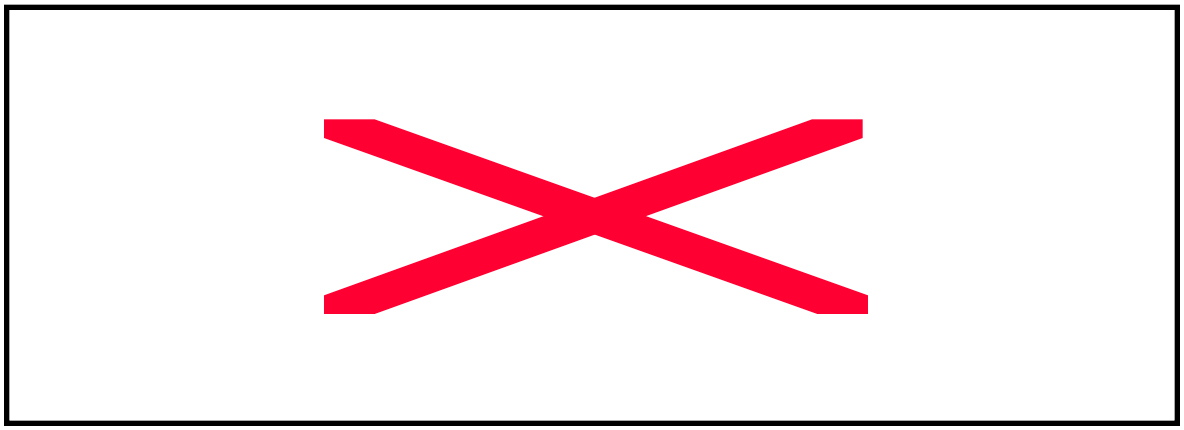
GTime=0.XXXXX.

DSTime=0.XXXXX. (If Equipped)

Simply press the Reset button to reset DRT for another run.

Installation Drive Shaft sensor

1) Drill hole in drive shaft hoop for a 5/16" threaded rod. Hole must be positioned so sensor head is centered and perpendicular with drive shaft as shown above (Make sure car is at ride height when determining hole location). **Drive shaft hoop must be solid (minimal play if held in with pins).**
2) Wrap reflective tape around drive shaft so it is centered with sensor head. Trim excess tape so that there is no irregularity in pattern of light and dark. It is best to trim excess tape in the middle of a reflective section.



Testing DRT

1) After installation is complete the unit should be tested.
2) Power up DRT.
3) Press trans brake button. The DRT should still display TIMER READY. Now release trans brake button. The DRT should now say ARMED. If DRT arms by pressing trans brake button (before release) then change input switch type NORMALLY OPEN or CLOSED.
4) DRT with **G meter only**: While armed tilt unit from level to vertical. Display should know count down and then show GTime. If the letter "G" is displayed then unit is waiting for drive shaft to trip, which means the DRT must have drive shaft sensor enabled. You must go through **setup** and disable drive shaft sensor.
5) DRT with **G meter and drive shaft sensor**: While armed turn drive shaft. The display should now show a "D" signaling trip of drive shaft. Next tilt DRT to vertical position to trip G meter. Now display should show countdown and then reaction times.

Please note: The DRT will automatically re-arm itself is the trans brake button is pressed again before the 15 sec count has completed. So if you stage you car with the trans brake or if you accidentally hit the trans brake button it will not effect the reaction times of the DRT!