



WR35WS – GTR BRAKE COOLING SYSTEM PICTORIAL INSTRUCTION GUIDE



WR35WS is a specially designed brake cooling system that uses water as a means of directly cooling the GTR brakes. Capable of reducing brake temperatures by up to 100 degrees WR35WS also has the advantage of extending brake component life. Installation is straight forward but should be carried out referencing the pictorial installation guide



Mounting the water spray brackets requires removal of the caliper bolt in the centre of the front caliper. It is easy to locate and remove. The process is the same for the left and right hand sides of the vehicle.

The CNC machined water spray brackets locate each spray jet as shown in the picture. Ensure that there is no interference between any part of the braking system and the water spray nozzle when fitting the system. Locate the spray nozzle within 5mm of the disc vane inlet. Ensure that the nozzle is spraying directly into the centre of the brake disc and not to one side.



The braided spray nozzle lines can now be run to the shown location on the bottom of the radiator shroud where a hole exists in the structure for fitment of a supplied P-clamp. The rubber line can

then be run to the location of the water tank, with care taken to keep it away from hot exhaust components.



Use P-clamps (if supplied in earlier systems) to fix the spray nozzle lines to the front mounting point as show in the picture or simply route the braided line underneath the black metal factory bracket. This ensures that there will be no fouling between the suspension, brake, wheel and any WR35WS component.



WR35WS spray nozzle lines can then be cable tied to the existing brake lines so that their shape emulates that of the brake lines perfectly. Use cable ties at similar distances to that show in the photograph.



We recommend the WR35WS water tank be located in the trunk of the GTR. This is the location we have used in all of our testing, and this also ensures that no water can make its way into the cabin of the GTR at any time.

Mounting is best facilitated by removing the rear plastic trunk insert and then using simple nuts and bolts to screw the tank into position. Locating the tank at each of its four corners provides a strong mounting.



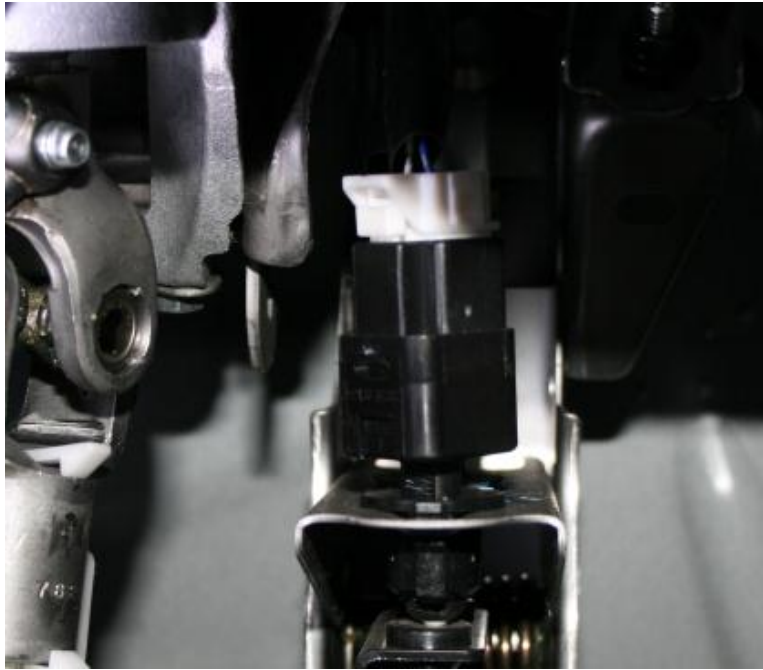
Whilst the WR35WS wiring installation is simple, one of the inputs required for the WR35WS processor unit is the Vehicle Speed

Signal. This can be found behind the GTR Multimedia/Control unit, which requires removal of the right side trim panel (lower) to access this plug. The VSS signal is the light blue wire (JDM) that we have joined into in this shot.

This VSS wire colour can change (sometimes it is violet) depending on the 'market' of the GTR, whether it is a USDM, JDM, EDM, or ADM etc. The most definitive description of the GTR VSS wire is that it is Pin 38 in the connector shown above.



If installing a WR35WS version that utilises the existing washer tank then this is the washer motor trigger wire when unplugged from the indicator stork. It is the grey wire



Brake switch wiring can be located directly on top of the brake pedal itself. This will require looking under the dashboard and above the pedal to access the correct plug.



Once the system is wired the control module (which is pre-programmed not to trigger the WR35WS system under 40mph) can be tucked away neatly under the dash, ensuring there is no strain on the wiring.

Testing of the completed system should be carried out on a chassis dynamometer if available. We would recommend that the vehicle be driven at 50mph with WR35WS armed with the brakes lightly 'dragged' (enough to turn the brake lights on and no more)

for 15 seconds or so to see evidence of water forming on the inside of the rim. The same test can be carried out on a race track or closed road if necessary.