

Owners Manual: TLS-PSR1-PRO+ - TLS-PSR2-PRO+



FORWARD

We wish to thank you for choosing this innovative Translogic product. Your new Translogic product is the result of Translogic's advanced engineering, exhaustive testing and continuous striving for superior reliability, safety and performance.

Read this instruction manual before fitting and operating your product so you will be thoroughly familiar with the proper operation of its controls, features, capabilities and limitations. To ensure a long trouble free life for your product give it proper care and maintenance as described at the back of this manual.

This manual covers a basic installation and where possible the appropriate information has been provided to assist you through each stage of the installation.

Due to improvements in design and performance during production there maybe, in some cases, minor discrepancies between actual product and the illustrations and text within this manual.

SAFETY

When embarking on the fitment of your Translogic product it is advisable to position the motorcycle/vehicle so it cannot cause injury or damage by falling over/rolling forwards or backwards. The use of a paddock stand is ideal or if necessary chock the wheels.

When removing or adding electrical cables to the vehicle battery or wiring harness always remove the negative earth cable/terminal before the positive cable/terminal. Replace the negative earth cable/terminal last to avoid shorting the electrical system.

INSTALLATION GUIDELINES

TAKE YOUR TIME! When mounting the components ensure that the units are protected from excessive vibration and harsh environmental elements where possible, and that they are securely mounted. When using adhesive pads ensure that the mounting surfaces are grease/dust free by wiping thoroughly with an alcohol based fluid or 'methylated spirits'. Use a hot air blower or hair dryer to heat up the mating surfaces so the surfaces are warm to the touch prior to attaching the units in position.

ATTENTION! BE VERY CAREFUL NOT TO BEND/PULL THE WIRES EXITING THE PSR ECU AND POWERSHIFTER OTHERWISE THE WEATHERPROOF SEALS MAY BE COMPROMISED RESULTING IN WATER INGRESS AND PRODUCT FAILURE.

When routing electrical cables ensure the cables cannot become trapped or pinched which could result in malfunction and secure with cable ties where necessary. For a really professional installation solder any wire connections if applicable. Remember to place heat shrink sleeves over the wires before making any wire connections.

If you encounter difficulties with this installation please do not struggle, call your vendor/supplier for professional assistance.

FITTING THE PSR ECU

ATTENTION! The PSR ECU should be positioned so it does not exceed an operating temperature of +70°C and must be installed where it is protected from excessive vibration and harsh environmental elements. Under the riders seat or at the front of the motorcycle forward of the head stock area or near the fairing bracket area is an ideal position.

1. Locate a suitable flat surface area for the PSR ECU housing to adhere to. Do not actually fix the ECU into position until you have installed the rest of the components and have routed the relevant cables. Once you have completed the rest of the installation you can then finally fix the ECU into position using the supplied velcro mounting pads. Make sure you de-grease and warm up the mounting surfaces prior to peeling the backing off of the velcro pads and securing into position. Cold surfaces result in poor adhesion! No part of the PSR ECU housing is permitted to touch any other object such as the chassis, bodywork etc.

CONNECTING THE PSR HARNESS

1. Route the harness through the motorcycle/vehicle to the battery area and connect the black eyelet ring terminal wire to the negative battery terminal only. Connect the red eyelet ring terminal wire to the positive battery terminal only.

NOTE1: If you have an optional Translogic Intellishift Quickshifter ECU then you must connect the Powershift/Quickshift output connector to the corresponding Quickshifter sensor connector on the Quickshifter harness.

NOTE2: If you have an optional Translogic Blip Assist ECU then you must connect the

Powershift/Blip Assist output connector to the corresponding Blip Assist connector on the Blip Assist harness. See diagram A.

NOTE3: You will need to use the supplied programming connector to simulate connection to the **DURASHIFT** quickshifter sensor which is used to enter and navigate Pro-Tuner-Mode within the Intellishift and Blip Assist ECUs. There is no requirement to use the **DURASHIFT** sensor when using the PSRPRO system as the PSRPRO-ECU outputs a simulated sensor signal.

NOTE4: NOT SUITABLE FOR CDI IGNITION SYSTEMS! You may wish to connect up the long black 'RPM sensing' wire to one of the ignition coil signal wires to enable the 'shift hold' feature where the shifter will have the ability to complete each gearshift even if a shift button is released early. See diagram B.

Diagram B.

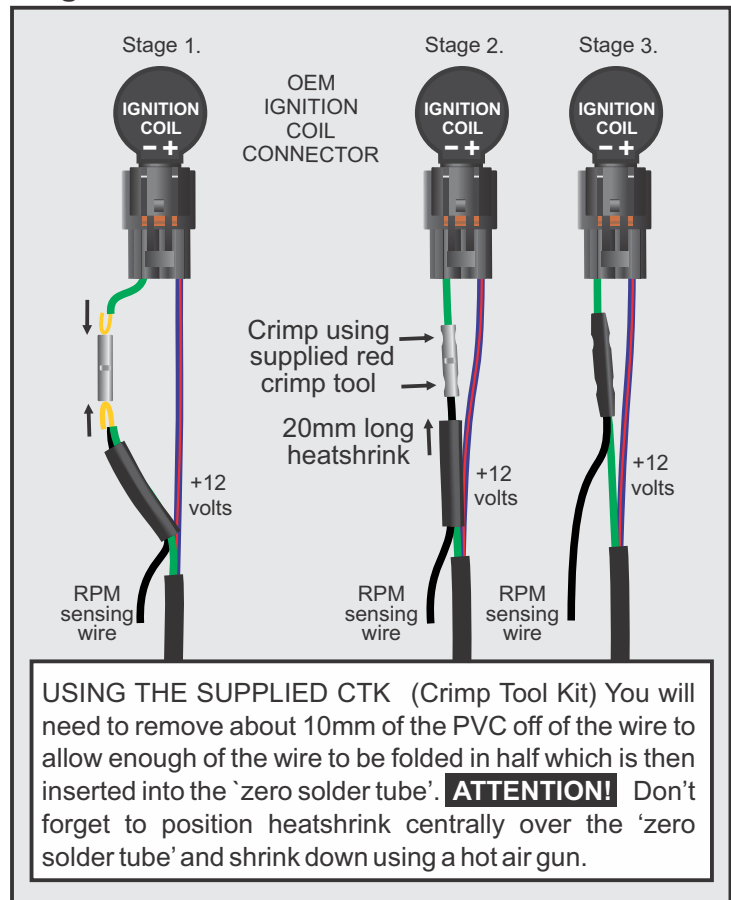
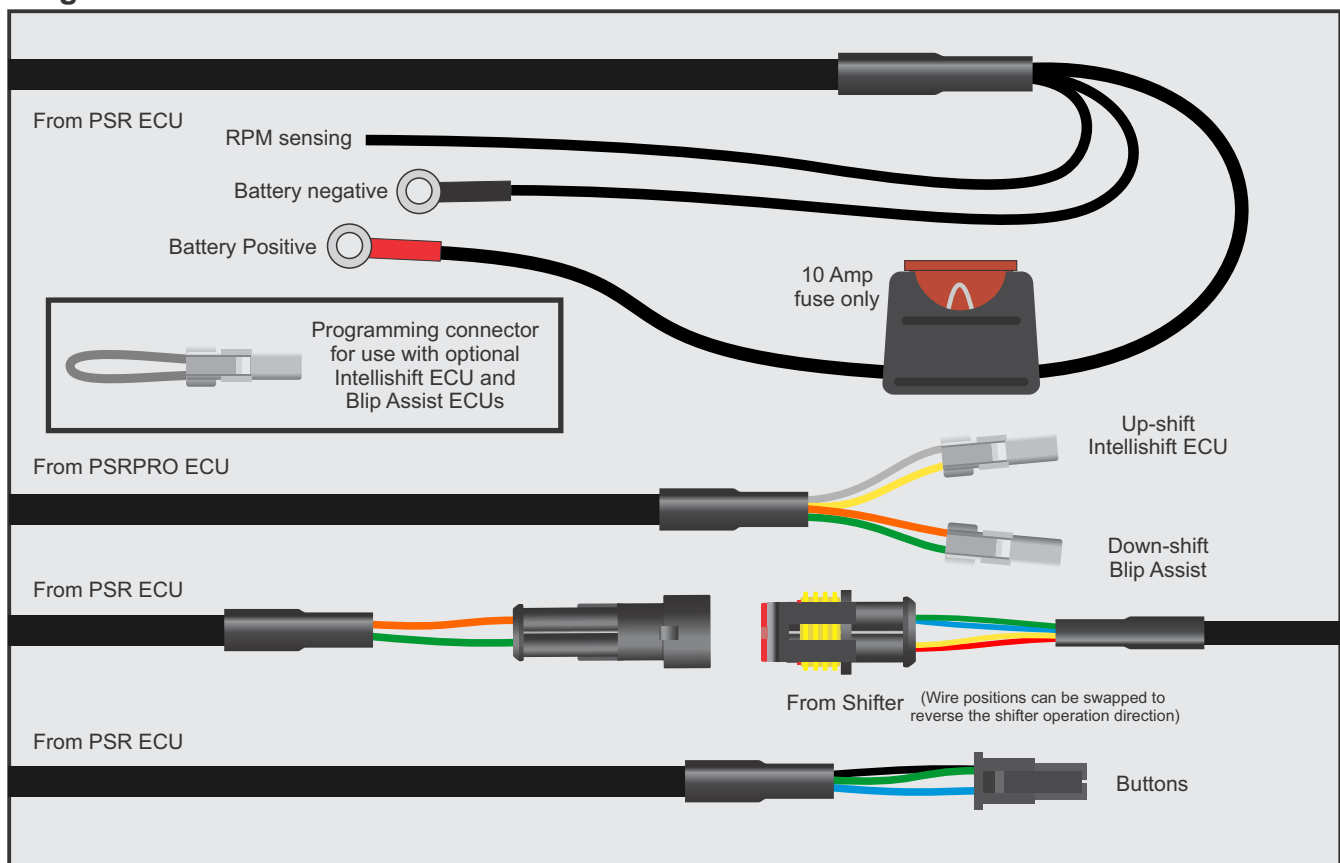


Diagram A.



INSTALLING THE PSR SHIFTER

ATTENTION! A suitable mounting bracket will need to be produced to install the shifter. The material should be 5mm thick aluminium or steel due to the high torque design of the shifter.

WARNING! The PSR shifter should be positioned so it does not exceed an operating temperature of +80°C and there should be sufficient 'air flow' to keep the shifter from overheating. If the shifter overheats there is the possibility of a premature failure.

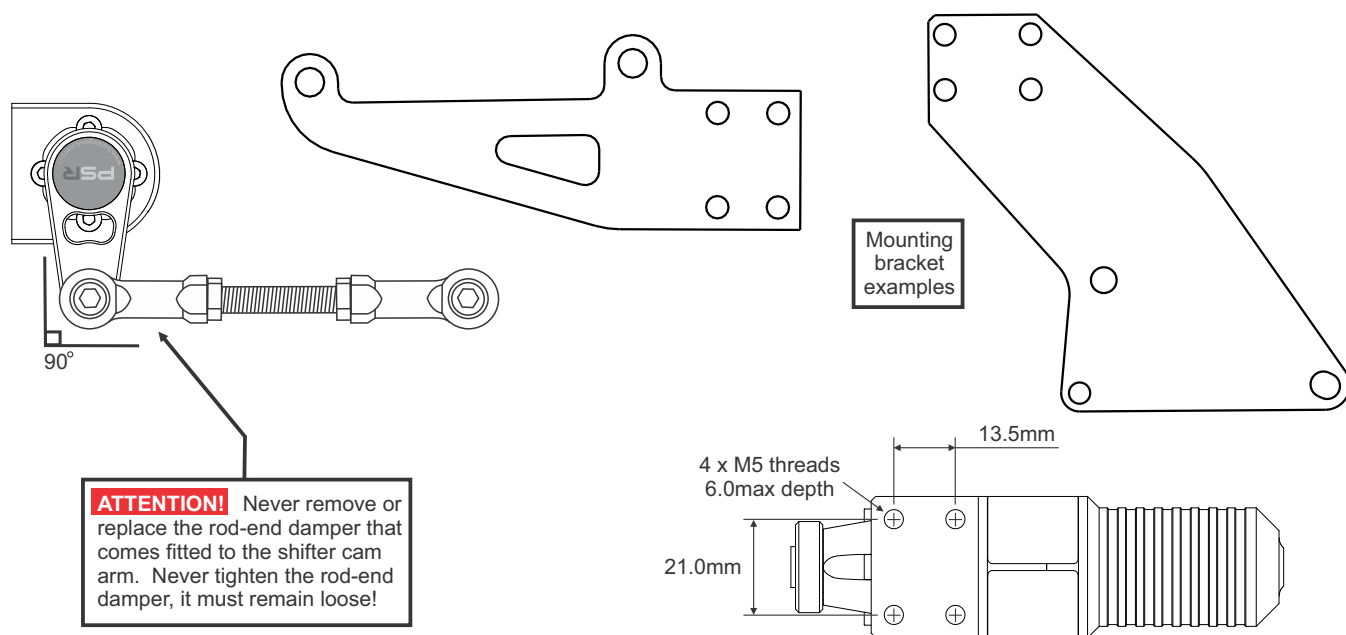
1. Locate and identify a suitable position for the PSR shifter to be installed. **ATTENTION!** Do not mount the shifter to the engine as severe vibration and harmonics can cause premature failure which will not be covered by the product warranty. See the mounting guidelines below and actual install photographs on page 5.

2. Using the supplied tie-rod kit attach one end of the tie-rod assembly to the gear lever mechanism as shown on page 5. Ensure that the rod end is attached to the gear lever at a point which travels through a distance of between 14.0mm - 18.0mm from rest to fully engaging 1st gear. Ensure that 1st gear actually engages by rotating the rear wheel when checking for total gear lever travel. Use the accessories supplied in the fitting kit to secure the rod end into the gear lever as necessary.

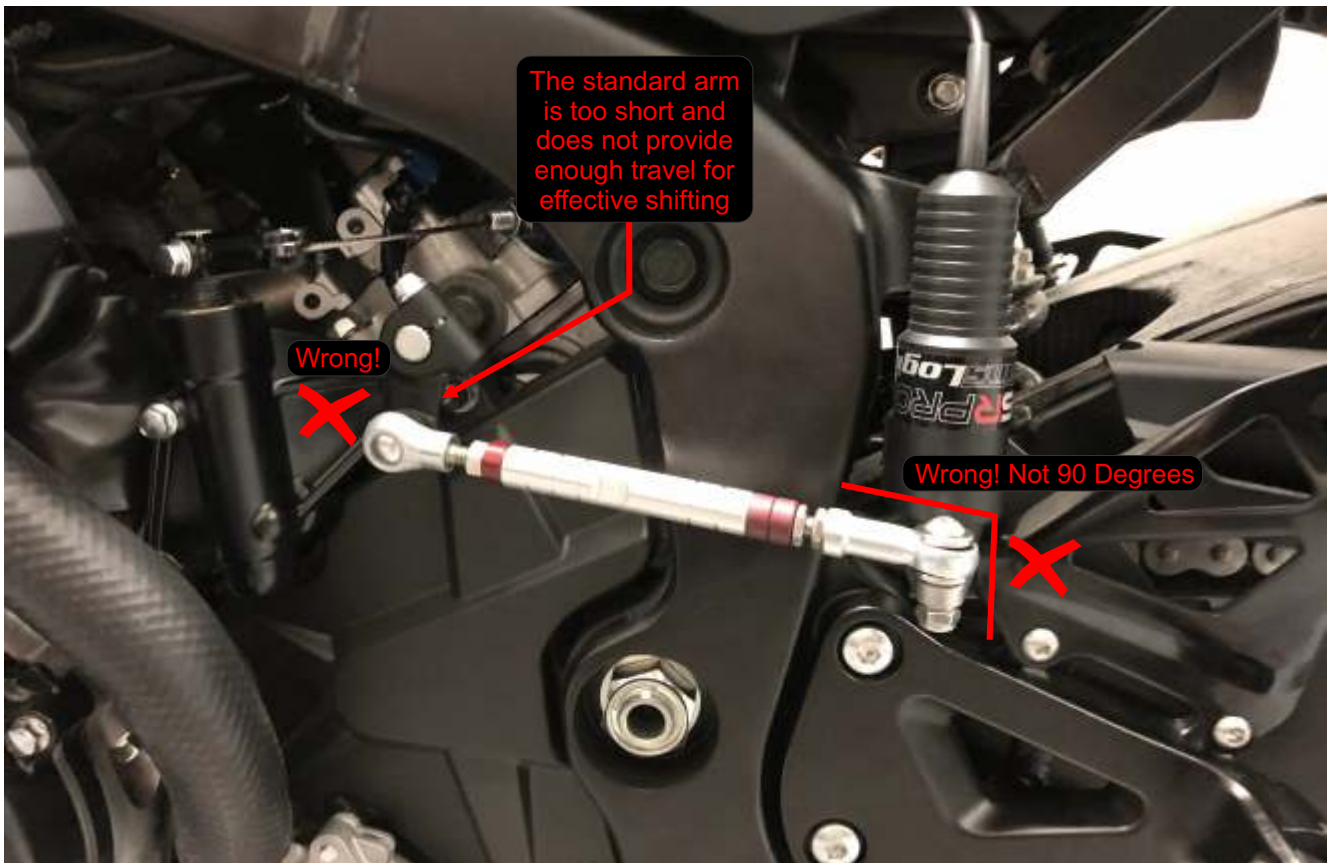
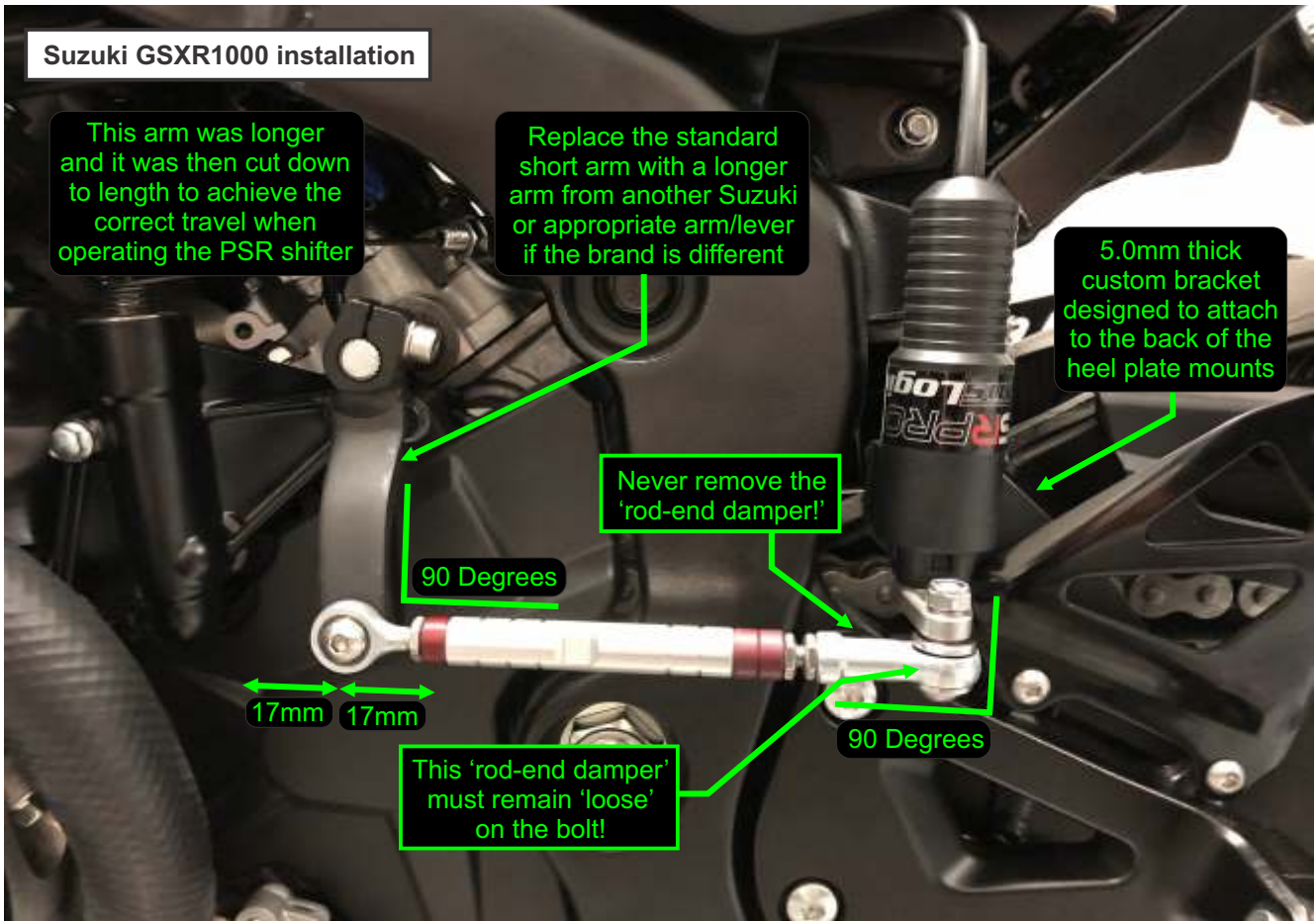
NOTE: Typically the standard aluminium selector shaft arm does not have enough travel to use. Do not connect directly to this arm as there will not be enough travel and leverage for the PSR shifter to operate correctly.

3. Attach the opposite end of the shifter to suitable M6 bolts or larger on the engine casing using the mounting bracket you have fabricated. If using a 5mm thick bracket or thicker (see 'Mounting bracket examples' below) you might have to increase the length of the bolts going through the bracket to ensure the bolts are still long enough to secure the bracket into position. If the engine casing bolts, footrest bolts or heel plate bolts originally had Loctite on them then use a suitable Loctite when replacing them back into the engine casing.

GUIDELINES FOR PSR SHIFTER INSTALLATION



Suzuki GSXR1000 installation



FITTING THE HANDLE BAR BUTTON BRACKET ASSY & BUTTONS

1. Peel back the left handle bar grip flange to allow sufficient room between the grip flange and the switch gear mouldings to fit the handle bar buttons bracket. *Ensure any remaining handle grip adhesive is removed.* Offer up into position the bracket and secure into position so the buttons are below the handle bar facing you. (See below.)

NOTE: The buttons should ideally be positioned so the tip of your thumb just touches the button face, when you squeeze the clutch lever in your thumb will automatically press the button. Secure the bracket by tightening the small M2.5 allen bolt.

2. If you are mounting the buttons into a steering wheel assembly then you must de-solder each button and feed the cable through a 'D' shape profile hole in the steering wheel. Re-solder the cables to the buttons and heat shrink the sleeve onto the threaded portion of the button. *Apply silicone sealant to the outside of the sleeve in close proximity to the button body to enable the support gland to screw on easily and make a weatherproof assembly.*

3. Now route the cable to the PSR ECU harness and connect to the corresponding connector.



OPERATING THE POWERSHIFT

1. To use the Powershift system simply press the right hand button for upshifts and the left hand button for down shifts. Be aware that you must use the clutch when shifting gear up and down if you are not using a compatible Intellishift Quickshifter ECU or Blip Assist ECU.

NOTE: Remember that you should press and hold the shift buttons until you are sure the next gear has been selected. If you are utilising a compatible Translogic Intellishift Quickshifter ECU or Blip Assist ECU refer to their respective manuals for further information on installation and use.

2. To select neutral gear carry out a 'half button press' where you press either an upshift or downshift button for a shortened period of time. This will result in a 'shorter shift distance' as you would carry out to select neutral gear normally.

TROUBLE SHOOTING

- 1. No power-up** - Check for incorrect battery terminal connections, blown fuses, poor negative battery terminal connections. Check for severed or trapped wires.
- 2. No shift activation** - Check the shifter and buttons connectors are plugged into the PSR harness connectors. Check for severed or trapped wires. Check that the Quickshifter harness connectors have not been greased as this will cause a poor electrical connection!
- 3. The PSR does not 'quickshift'** - Check the connection between the PSR ECU and the Intellishift ECU. Ensure you are using the correct connectors from the PSR harness. If using a QSX/QSX_i ECU ensure the SHIFT FORCE adjuster is fully 'anti-clockwise'. It may be necessary to increase the interrupt duration within the Intellishift ECU. See the Intellishift and Blip Assist ECU manuals for further information.
- 4. For further trouble shooting:** contact your vendor/supplier or Translogic Systems Ltd.

GENERAL PRODUCT WARRANTY AND SERVICING

As with any technical equipment of this nature it is strongly recommended that the exposed product items such as the PSR ECU, shift buttons and shifter should be kept clean and checked regularly. These units should be cleaned by removing excess dust with a cloth or small nylon brush. **AVOID USING A JET WASH WITHIN THE VICINITY OF THESE UNITS.**

1. This Translogic PSR system is covered by a 6 month warranty from the date of purchase, against any defects in materials or workmanship.
2. This 6 month warranty will be voided if the product is not installed as directed in the installation manual that can be downloaded from our websites: www.translogicuk.com & www.translogicusa.com.
3. If any defect should occur during the warranty period the product should be returned to Translogic Systems Ltd, (*see address*), or alternatively to the place of purchase along with proof of purchase. This warranty does not cover return shipping costs.
4. Translogic Systems Ltd will examine the product and if it is found to be defective due to faulty materials or bad workmanship will, without charge, repair or replace the product at their discretion. No third party labour costs are covered by this warranty.
5. If the product covered by this warranty is damaged due to accidents, misuse, modification or unauthorised repair, shortening of cables, broken weatherproof seals due to cable exit bending/pulling or incorrect electrical connections then this warranty becomes void.
6. This warranty is personal to the purchaser and is not transferable.
7. Products must not be returned to Translogic Systems Ltd without prior authorisation by email. Returned items should be packed carefully to avoid damage in transit. Please include details of the fault together with your name, address and contact telephone numbers.