

Installation Document



Installing VIU for Generic Hydraulic Kit **2-1294**

Revision A
April 08

Document Revision History




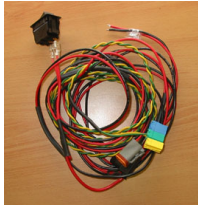
Date	Change Description	Rev #	Project #	Originator
28/03/08	Initial Revision	A		PB

Introduction

This document will provide instruction on connecting a VIU kit to a Hemisphere hydraulic valve kit and the mojoRTK console. The following outlines the steps that will be covered.

Step	Description
1	Install Wheel Angle Sensor
2	Install VIU
3	Connect VIU Loom to VIU
4	Connect WAS Loom to VIU Loom
5	Connect Valve Adaptor Cable
6	Connect mojoRTK Interface Cable to VIU Loom


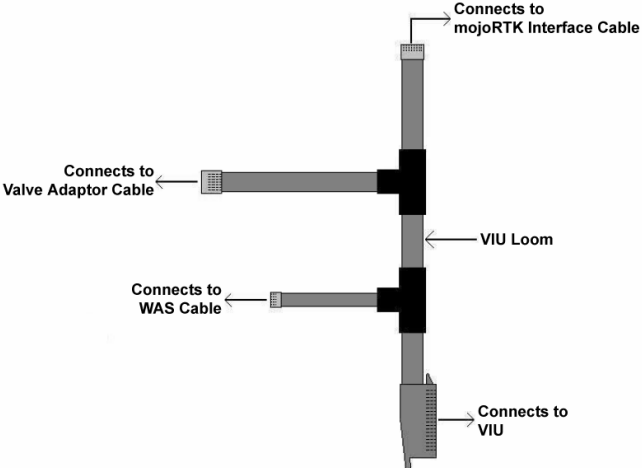
Parts Required

BEELINE Arro VIU3	
Wheel Angle Sensor (WAS) Kit	
WAS Bracket	
VIU Loom	
mojoRTK BEELINE VIU Cable	
VIU to Hemisphere Valve Cable Adaptor	

1. Install Wheel Angle Sensor

Step	Description	Image
1.1	<p>The WAS works on the principle of a magnet rotating around a sensor.</p> <p>The sensor is fixed to a bracket while the magnet is fixed to a lever which moves as the steering moves left and right.</p>	
1.2	<p>In a typical WAS installation the Threaded Rod end of the WAS will be connected to a steering tie rod arm or similar moving point.</p> <p>The Sensor end of the WAS will be connected to a fixed point on the vehicle via the supplied bracket.</p> <p>In some cases it may be necessary to modify the supplied bracket or manufacture a new one.</p> <p>It may also be necessary to shorten or lengthen the threaded rod, depending on the vehicle the WAS is being installed on.</p>	
1.3	<p>When the sensor is inserted into the magnet ensure the filled hole lines up with the alignment mark when the steering is straight ahead.</p>	
1.4	<p>Test the WAS by slowly turning the steering full lock left & right.</p> <p>It is helpful to have a second person watching to ensure that the WAS is not damaged.</p>	
1.5	<p>The WAS cable should now be run along the vehicle to the location where the VIU is being installed.</p>	


2. Install the VIU

Step	Description	Image
2.1	The VIU is a rugged solid state processing unit which can be mounted inside or outside the vehicle	
2.2	<p>Select a location where all cabling can reach the VIU wiring loom and mount the VIU using the 4 bolt mounting points.</p> <p>If mounting the VIU outside the vehicle ensure the Connector is mounted down towards the ground.</p>	
2.3	Connect the VIU Loom to the VIU and to all other cables.	



3. Connect VIU Loom to VIU

Step	Description	Image
3.1	<p>Be sure the Quick Release Lever is in the open position.</p> <p>Align the edge of the VIU Loom against the VIU Port.</p>	
3.2	<p>Gently push the VIU Loom so it fits snugly into the VIU Port.</p>	
3.3	<p>Push down the Quick Release Lever to lock the VIU Loom into position.</p>	
3.4	<p>If the VIU is mounted outside the vehicle, route the VIU Loom from the VIU towards the Tractor Cab, leading it into the Tractor Cab through a suitable entry point.</p>	

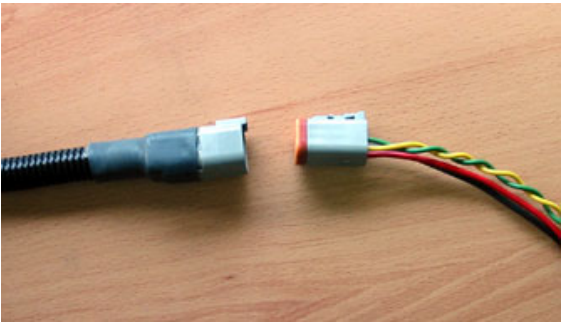
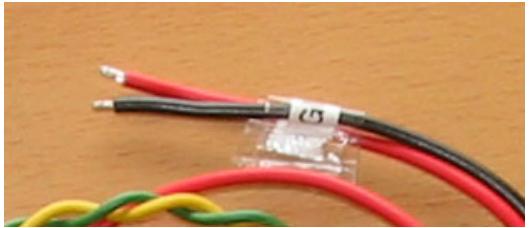
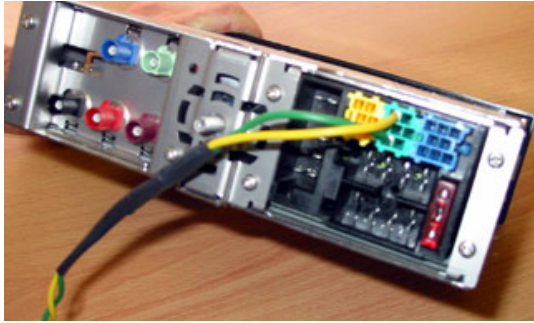
4. Connect WAS Cable to VIU Loom

Step	Description	Image
4.1	The WAS Cable connects to the 4 pin Deutsch plug on the VIU Loom	

5. Connect Valve Adaptor Cable

Step	Description	Image
5.1	Connect the Valve Adaptor cable to the 12 pin Deutsch plug on the VIU Loom	
5.2	Connect the Round 7 pin connector to the original Valve Control Cable which runs down to the hydraulic valve block	

6. Connect mojoRTK VIU Interface Cable

Step	Description	Image
6.1	Connect the 6 pin Deutsch plug on the mojoRTK VIU Interface Cable to the 6 pin Deutsch plug on the VIU Loom	
6.2	Connect the Red & Black wires on the mojoRTK VIU Interface Cable to a suitable 12 volt source	
6.3	Connect the multi-colour connector to the appropriate port on the back of the mojoRTK console.	
6.4	<p>When operating the steering the switch in the mojoRTK VIU Interface Cable is to supply power to the VIU & Hydraulic Valve.</p> <p>This switch should be OFF any time the auto steer is not being used.</p> <p>For convenience this switch should be mounted in a spare switch hole on the tractors console.</p>	