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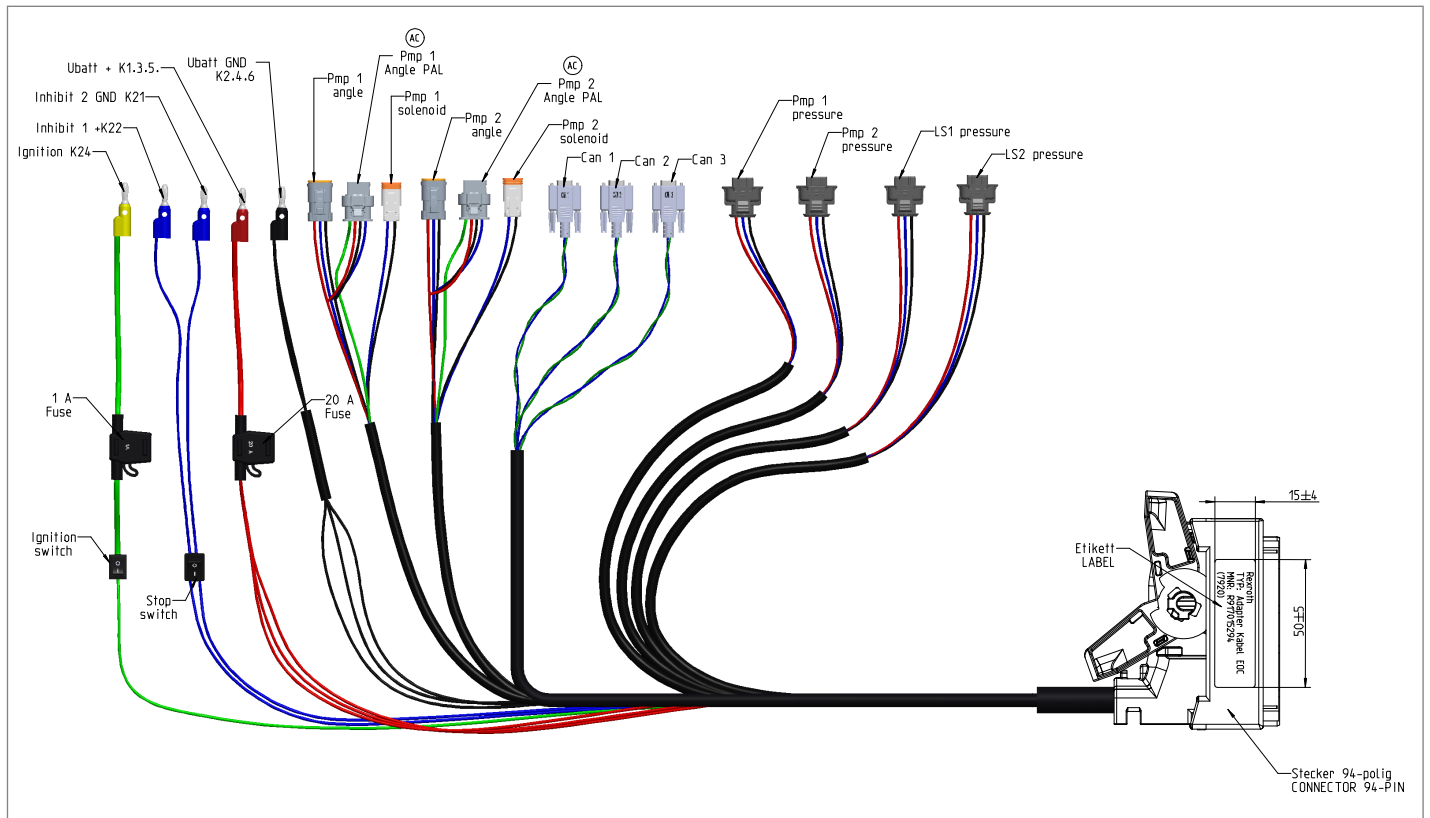MOTION SOLUTIONS

eOC BODAS pump control Machine starter kit

General information

▶ Mat.-No.: R917015295
▶ Ready-to-use starter kit for eOC pump control
▶ 94-pin mating connector suitable for RC40
▶ Independent control of two pumps possible
▶ Access to 3x CAN
▶ Integrated fuses for U_{bat} (20 A) and ignition (1 A)
▶ Including ignition and stop switch
▶ Connection of SWS20 and PAL sensor possible
▶ Wire length: approx. 3 m

Content of eOC pump control machine starter kit

▶ 1x BODAS Controller RC5-6/40
▶ 1x BODAS-service 4.x USB-Dongle License
▶ 1x eOC Wiring harness for SRC eOC ASrun

Wiring harness drawing

Wiring details

Pin	Description	Function	Terminal / connector
K01, K03, K05	Power Supply Terminal 30	Power supply	4 mm "Banana"-plug
K02, K04, K06	Power Ground Terminal 31	GND for power supply	4 mm "Banana"-plug
K07	Pump 2 HS	Pump 2 Solenoid	PIN 1 DEUTSCH DT06
K15	Pump 2 LS	Pump 2 Solenoid	PIN 2 DEUTSCH DT06
K16	Pump 1 LS	Pump 1 Solenoid	PIN 2 DEUTSCH DT06
K21	Inhibit 2	Inhibit 2 GND	4 mm "Banana"-plug
K22	Inhibit 1	Inhibit 1 Power Supply	4 mm "Banana"-plug
K24	Ignition Terminal 15	Ignition K24	4 mm "Banana"-plug
K29	Pump 1 HS	Pump 1 Solenoid	PIN 2 DEUTSCH DT06
K36	PR4 LS 1 Signal	PR4 LS 1 Signal	PIN 2 Bosch Compact
K39	Pump 2 Angle Signal	Pump 2 Angle Signal	PIN 3 DEUTSCH DT06 / PIN 4 MCON
K46	Pump 1 PR4 GND, PR4 LS 1 GND Pump 2 PR4 GND, PR4 LS 2 GND	common GND	PIN 1 Bosch Compact
K47	Pump 1 Angle GND	Pump 1 Angle GND	PIN 1 DEUTSCH DT06 / PIN 3 MCON
K52	Pump 2 PR4 Signal	Pump 2 PR4 Signal	PIN 2 Bosch Compact
K53	PR4 ADC Signal	Pump 1 PR4 Signal	PIN 2 Bosch Compact
K56	PR4 LS 2 Signal	PR4 LS 2 Signal	PIN 2 Bosch Compact
K59	Pump 1 Angle Signal	PIN 3 - DEUTSCH	PIN 3 DEUTSCH DT06 / PIN 4 MCON
K55	Pump 1 Angle PAL PWM	Pump 1 Angle PAL PWM	PIN 1 MCON
K61	Pump 2 Angle PAL PWM	Pump 1 Angle PAL PWM	PIN 1 MCON
K70	Pump 1 Angle VSS, Pump 2 Angle VSS, Pump 1 Angle PAL VSS, Pump 2 Angle PAL VSS, Pump 1 PR4 VSS, PR4 LS 1 VSS, Pump 2 PR4 VSS, PR4 LS 2 VSS	common VSS (Sensor Supply)	PIN 2 DEUTSCH DT06 / PIN 2 MCON
K79	Pump 2 Angle GND	Pump 2 Angle GND	PIN 1 DEUTSCH DT06 / PIN 3 MCON
K66	CAN_1 Low	CAN bus interface	DB9-Connector
K67	CAN_2 Low	CAN bus interface	DB9-Connector
K68	CAN_3 Low	CAN bus interface	DB9-Connector
K88	CAN_1 High	CAN bus Interface	DB9-Connector
K89	CAN_2 High	CAN bus Interface	DB9-Connector
K90	CAN_3 High	CAN bus Interface	DB9-Connector

Starting guide

This document shall help to get started with eOC pump control software **before** commissioning and customization of parameter settings. For commissioning, please follow the steps explained in the ASrun-eOC100 "Calibration Guide".

Preparation check list

Software and tools (laptop)
- ☐ **BODAS-service v4.4.X** is installed and activated via **BODAS-service license** (USB-dongle or personal)
- ☐ **CAN-USB interface** with two channels is available and **PC software** to analyze CAN traces and relevant **drivers** are installed and running (recommendation: Vector VN1630A with CANalyzer software >v15; CANalyzer Config file available on demand)

BODAS-service (laptop)
- ☐ **VCI** (Vehicle CAN-bus Input) is configured and tested
- ☐ **SRC-eOC** is shown as "online" (when connected via CAN-USB interface)
- ☐ **BODAS-service app** ASrun-eOC matches with the installed BODAS-service Version (e.g., v4.4.2) and is visible in BODAS-service (eOC pump control software is pre-installed on SRC-eOC)
- ☐ Initial **parameter file** (.xml) matches with the intended pump type and is loaded into BODAS-service

Initial settings (machine)
- ☐ **eOC standard wiring harness** is connected according to wiring schematic
  - ☐ Voltage supply
  - ☐ Electrohydraulic pump control valve(s)
  - ☐ Pressure sensor(s)
  - ☐ Angle sensor(s)
  - ☐ CAN 1 & CAN 2 incl. terminating resistors with 120 Ohm
- ☐ **Ignition and stop** switches are activated
- ☐ **Baud rate** for CAN 1 and CAN 2 are set according to wiring schematic

Hello pump (machine)
- ☐ **CAN trace** is visible in analyzing tool (e.g., swivel angle, pressure)
- ☐ **Pump setpoints** can be varied via BODAS-service or CAN command

Additional standards and documentation

- ▶ Data sheet
- ▶ BODAS-service app
- ▶ CANalyzer configuration
- ▶ Calibration guide
- ▶ Failure handling table
- ▶ J1939 CAN specification
- ▶ ASrun wiring schematic eOC

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