

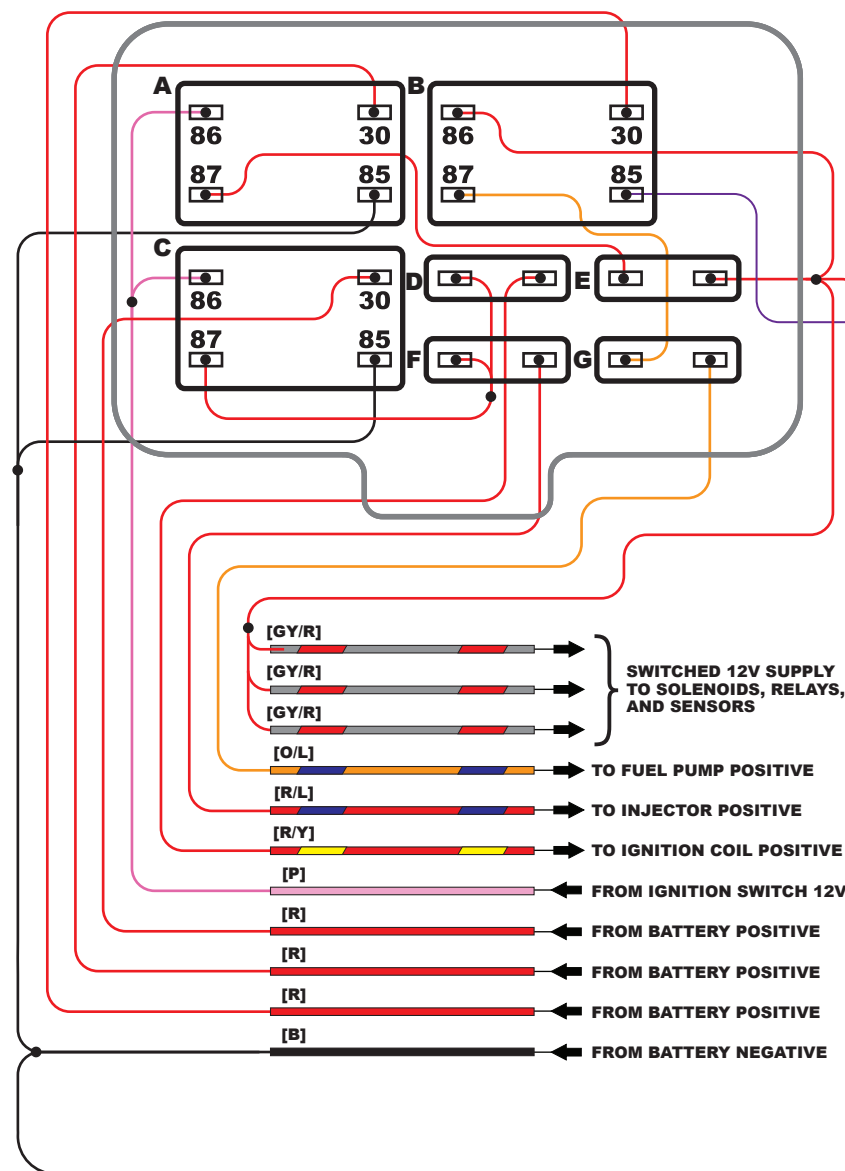


NEXUS T2 T1 PREMIUM UNIVERSAL WIRE-IN HARNESS

HT-030103 HALTECH MINI FUSE RELAY BOX (TOP VIEW)

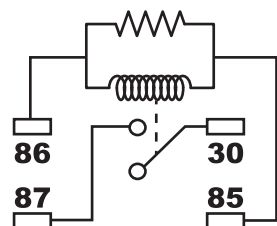
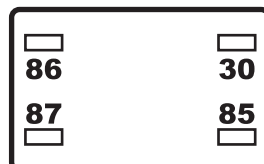
- (A) ECU RELAY
- (B) FUEL PUMP RELAY
- (C) IGN / INJ RELAY
- (D) IGN FUSE 15A
- (E) ECU FUSE 10A
- (F) INJ FUSE 15A
- (G) FUEL PUMP FUSE 30A

TOP VIEW



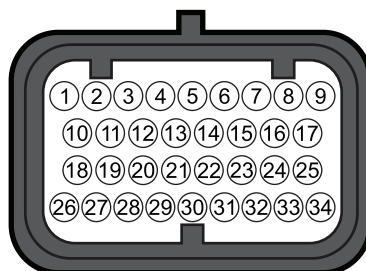
HT-030205 MICRO RELAY PINOUT AND SCHEMATIC

TOP VIEW



CONNECTOR A 34 PIN KEYWAY 1

LOOKING INTO
CONNECTOR ON
NEXUS T2 OR
NEXUS T1 ECU



WIRE COLOUR LEGEND

B = BLACK, BR = BROWN, R = RED, O = ORANGE, Y = YELLOW,
G = GREEN, L = BLUE, V = VIOLET, GY = GREY, LL = LIGHT BLUE,
LG = LIGHT GREEN, LY = LIGHT YELLOW, P = PINK, W = WHITE

WHEN TWO COLOURS ARE USED IN A WIRE'S COLOUR CODE, THE
FIRST LETTER INDICATES THE BASE WIRE COLOUR, AND THE
SECOND INDICATES THE STRIPE COLOUR.

NOTES

NOTE: IGNITION
OUTPUTS 5-6 ARE
NOT AVAILABLE ON
A NEXUS T1 ECU.

IGNITION 6X IGNITION OUTPUTS (4X IF USING NEXUS T1)

- 3A MAX CURRENT
- OVERCURRENT PROTECTED
- FLYBACK PROTECTED
- GLOBAL 12V OR 5V PULL-UP VOLTAGE
- PER OUTPUT 270R PULL-UP ENABLE
- VOLTAGE MONITORED

WIRE IGNITION OUTPUT TO
CYLINDER NUMBER FOR
DIRECT FIRE

UNUSED IGNITION OUTPUTS
CAN BE USED AS GENERIC
DPOs WITH 3A MAX OUTPUT OR
0-12V DIGITAL SWITCH INPUTS

WIRE GAUGE:
20 AWG

OUTPUT: GROUND

DPO 6X DIGITAL PULSED OUTPUTS

- LOW SIDE DRIVE
- 3A MAX CURRENT
- 10kHz SWITCHING SPEED
- OVERCURRENT PROTECTED
- FLYBACK PROTECTED
- INDIVIDUAL 4K7 PULL-UP TO 5V OR 12V OR DISABLE

UNUSED DPOs CAN BE USED AS
0-12V DIGITAL SWITCH INPUTS
WITH PULL-UP ENABLE

WIRE GAUGE:
20 AWG

OUTPUT: GROUND

SPI SYNCHRONISED PULSED INPUT

- SUPPORTS RELUCTOR AND DIGITAL SENSORS
- SUPPORTS 0-5V ANALOGUE INPUTS
- 22.5kHz MAX FREQUENCY
- 25V MAX INPUT VOLTAGE
- SWITCHABLE 1K PULL-UP

WIRE GAUGE:
22 AWG

MEASUREMENT RANGE:
-10V TO +10V

ECU POWER SUPPLY MUST BE FUSED AND RELAY-SWITCHED

SWITCHED
12V INPUT

ECU POWER GROUND

BATTERY GROUND

CAN 1 H

CAN 1 L

CAN 1 (ISO 11898)

SUPPORTS SPEEDS UP TO
1Mbit/s

HALTECH CAN

SUPPORTS ALL HALTECH
EXPANSION PRODUCTS

OR

VEHICLE CAN

• SELECTABLE
PRECONFIGURED VEHICLE
CAN PROTOCOL

• OBDII COMPLIANT

NOTES

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OUTPUTS 5-6 ARE
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A NEXUS T1 ECU.

INJECTOR 6X INJECTOR OUTPUTS (4X IF USING NEXUS T1)

- CURRENT CONTROLLED
- 0 - 8A PEAK CURRENT
- 0 - 2A HOLD CURRENT

WIRE INJECTOR OUTPUT TO
CYLINDER NUMBER

UNUSED INJECTOR OUTPUTS
CAN BE USED AS GENERIC
DPOs WITH 2A MAX OUTPUT OR
0-12V DIGITAL SWITCH INPUTS

WIRE GAUGE:
20 AWG

OUTPUT: GROUND

AVI 5X ANALOGUE VOLTAGE INPUTS

- INDIVIDUAL SOFTWARE
SELECTABLE 1K PULL-UP TO 5V
- USER DEFINABLE INPUTS
CAN BE ALLOCATED TO
AVAILABLE FUNCTIONS IN
THE SOFTWARE
- 30V MAX INPUT VOLTAGE
- 1000 SAMPLES/SECOND
- 1.5kHz MAX INPUT
FREQUENCY
- ALL AVIs CAN BE USED FOR
NARROWBAND O2

WIRE GAUGE:
22 AWG

INPUT: -10V TO +30V

SHIELDED 4-CORE CABLE [GY]

TRIGGER +

TRIGGER -

HOME +

HOME -

TRIGGER / HOME INPUTS

- SUPPORTS RELUCTOR AND
DIGITAL INPUTS
- SELECTABLE GROUND
REFERENCE AND PULL-UP TO 5V
- 48kHz MAX SIGNAL
FREQUENCY

SHIELDED 4-CORE
CABLE [GY/B]

KNOCK INPUT • -2.5V TO +2.5V AC INPUT ONLY

- 160Hz TO 48kHz SIGNAL
FREQUENCY

SHIELDED 2-CORE
CABLE [B/L]

+5V SENSOR SUPPLY • 200mA MAX OUTPUT CURRENT

- 500mA MAX OUTPUT
CURRENT
- DO NOT CONNECT TO
ENGINE, CHASSIS OR
BATTERY GROUND

NEXUS T2 T1 PREMIUM UNIVERSAL WIRE-IN HARNESS

DOCUMENT REVISION: 2.0

DATE: AUGUST 2026

HT-181201 REV C

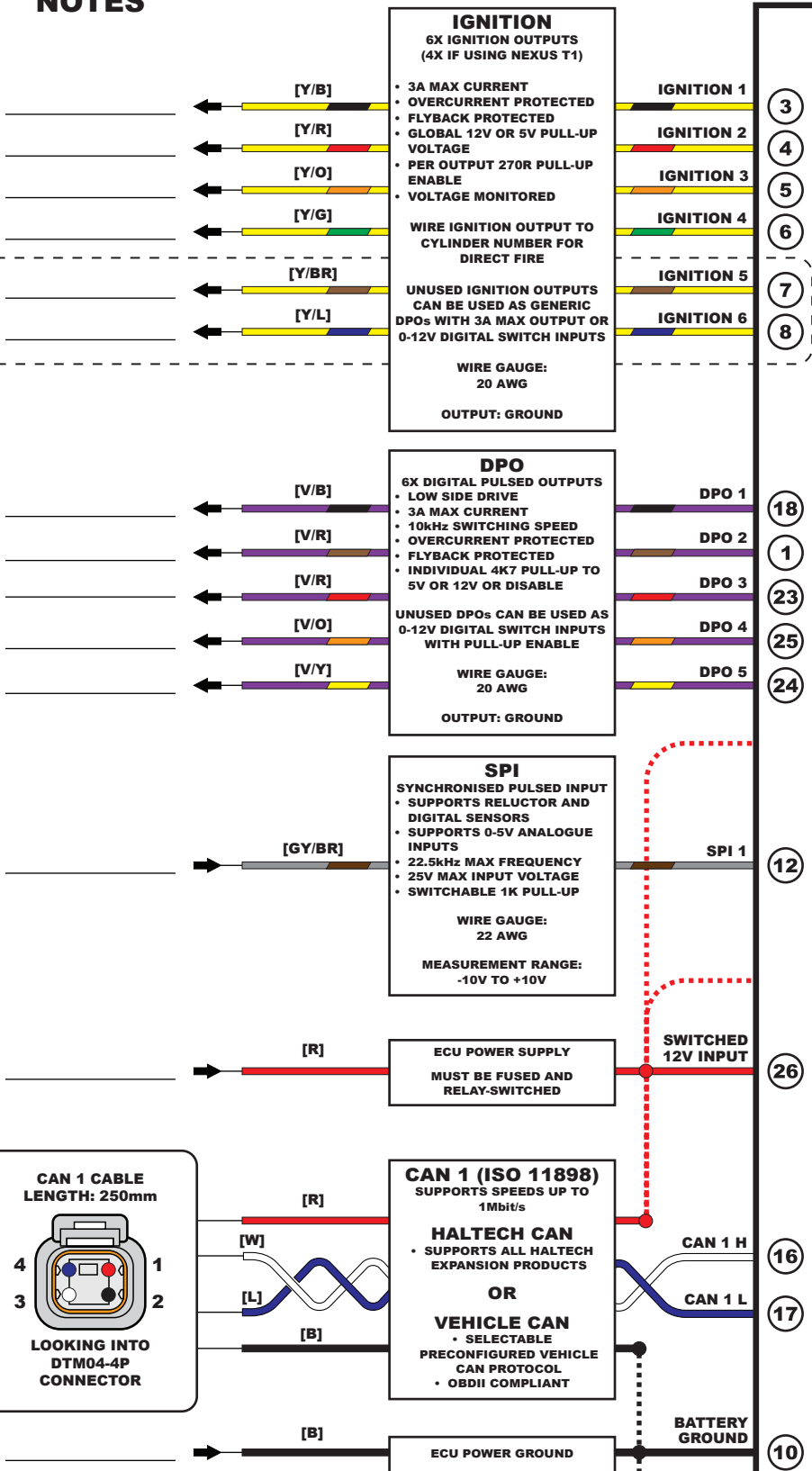
SHEET 1 OF 1



NEXUS T2 T1 BASIC UNIVERSAL WIRE-IN HARNESS

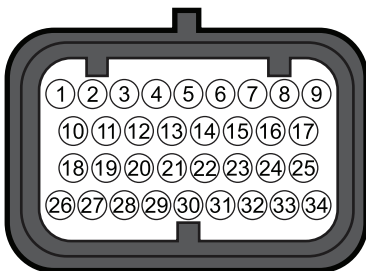
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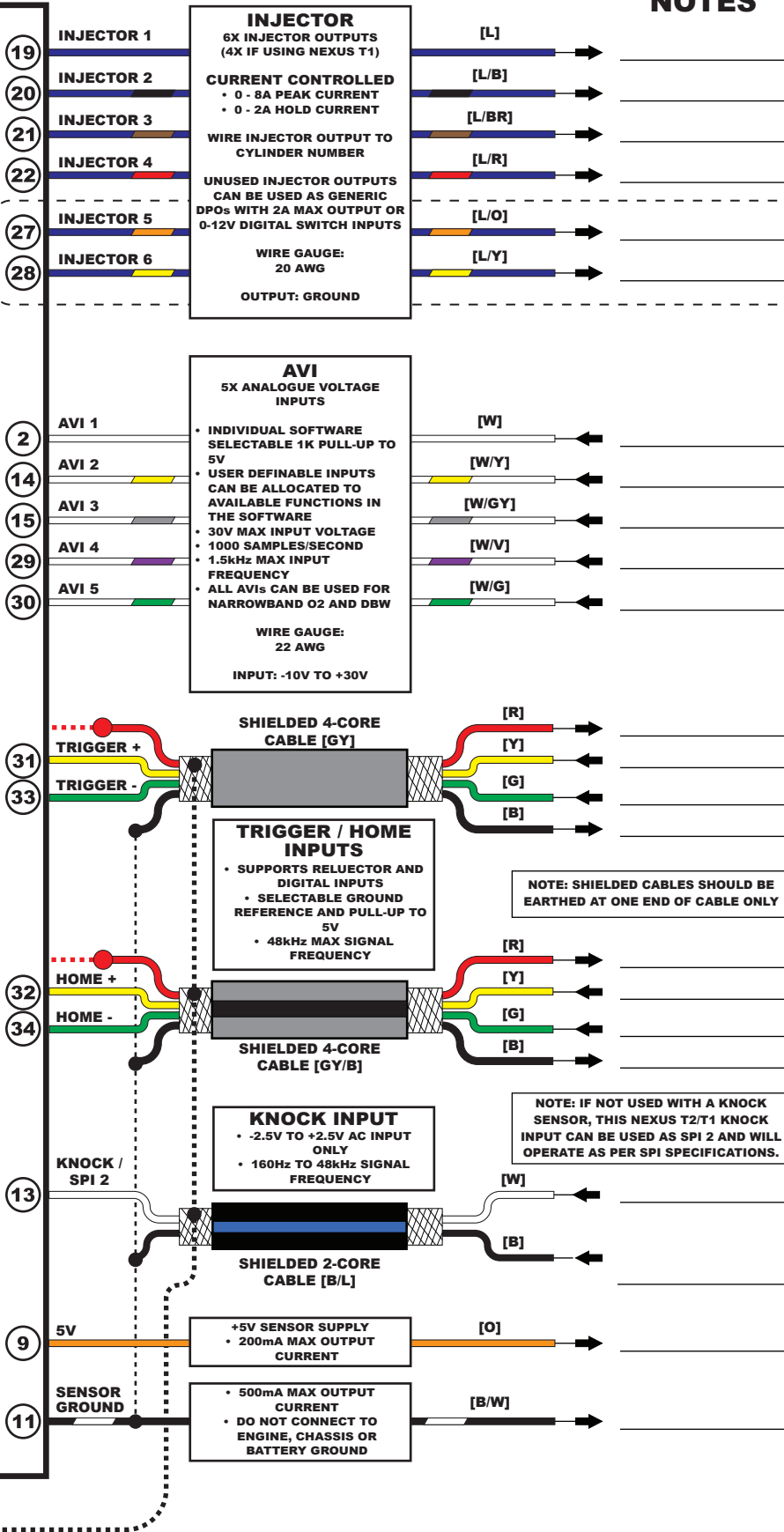


CONNECTOR A 34 PIN KEYWAY 1

LOOKING INTO
CONNECTOR ON
NEXUS T2 OR
NEXUS T1 ECU



34 PIN CONNECTOR (A)



NOTES

NOTE: INJECTOR
OUTPUTS 5-6 ARE
NOT AVAILABLE ON
A NEXUS T1 ECU.

NOTE: SHIELDED CABLES SHOULD BE
EARTHED AT ONE END OF CABLE ONLY

NOTE: IF NOT USED WITH A KNOCK
SENSOR, THIS NEXUS T2/T1 KNOCK
INPUT CAN BE USED AS SPI 2 AND WILL
OPERATE AS PER SPI SPECIFICATIONS.

WIRE COLOUR LEGEND
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Haltech	
NEXUS T2 T1 BASIC UNIVERSAL WIRE-IN HARNESS	
DOCUMENT REVISION: 2.0	HT-181200 REV A
DATE: AUGUST 2026	SHEET 1 OF 1