

LEMBAR KERJA DIDIK (LKPD)

DIGITAL

Subject: English for Automotive (TKR)

Topic: Procedure Text – Multi-Standard Automotive Wiring Codes (SAE vs. ISO/JIS)

Target Level: Advanced Group (Kelompok B)

SECTION 1: TEXT READING & COMPARISON

Read the following instruction and technical guide carefully before completing the tasks!

How to Read Multi-Standard Automotive Wiring Diagram Codes

Reading automotive wiring diagrams requires technicians to recognize different international standardization formats. The three most common standards in vehicle manufacturing are SAE (Society of Automotive Engineers / American Standard), ISO (International Organization for Standardization / European Standard), and JIS/Toyota (Japanese Industrial Standard).

1. Japanese Industrial Standard (JIS / Toyota Format)

- Structure: [Wire Area] [Base Color] - [Stripe Color]
- Rules: Primary insulation color comes first, followed by a hyphen and the tracer stripe color. Wire size is in .
- Example: 0.5 L-Y Blue wire with a Yellow stripe.

2. European Standard (ISO / DIN Format)

- Structure: [Wire Area] [Base Color] / [Stripe Color]
- Rules: Uses a slash (/) or two lowercase/uppercase color abbreviations. Solid colors are represented by two-letter codes (e.g., SW = Black, WS = White, RT = Red, GE = Yellow, BL = Blue).
- Example: 1.5 RT/GE Red wire with a Yellow stripe.

3. American Standard (SAE Format)

- Structure: [Wire Gauge (AWG)] [Color Name/Abbreviation]
- Rules: Uses American Wire Gauge (AWG) numbers where smaller numbers mean thicker wires. Colors are often spelled out or abbreviated using 3-letter codes (e.g., RED, BLK, BLU, YEL).
- Example: 18 BLK/YEL 18 AWG Black wire with a Yellow stripe.

SECTION 2: INTERACTIVE TASKS (LIVEWORKSHEETS FORMAT)

Task 1: Structure Analysis (Multiple Choice / Dropdown)

MULTIPLE CHOICE

Analyze the text above and choose the correct answer for each procedure text structural component!

1 What is the main Goal of the guide above?

- ☐ a) To install new audio speakers in European cars.
- ☐ b) To identify and decode wiring codes across SAE, ISO, and JIS automotive standards.
- ☐ c) To repair damaged wire insulation using a soldering iron.

2 Which section of the text provides the step-by-step rules for reading European (ISO) wiring?

- ☐ a) Materials & Equipment
- ☐ b) JIS Standard Section
- ☐ c) ISO / DIN Format Sub-Step

3 Identify the Imperative Verb used in the instruction title:

Answer: _____

_____ (Fill in the blank)

Task 2: Decoding Multi-Standard Codes (Drag and Drop / Matching)

Instruction: Match the technical wiring code on the left with its correct English description on the right!

1,25 mm² White base wire with a Black stripe (Chassis Ground).

14 AWG thick Red wire with a Black stripe.

2,5 mm² Black base wire with a White stripe.

0,5 mm² Green base wire with a Yellow stripe.

0,75 mm² Gray base wire with an Orange stripe.

0,5 mm² Gray base wire with a yellow stripe.

2,5 mm² White base wire with a black stripe.

Technical Code	Correct Description
1. 1.25 W-B (JIS)	
2. 2.5 SW/WS (ISO)	
3. 14 RED/BLK (SAE)	
4. 0.75 GR/OR (ISO)	
5. 0.5 G-Y (JIS)	



Task 3: Comparative Analysis & Critical Thinking (Short Answer)

Answer the technical questions based on the wiring standards guide!

1. Comparison: What is the main structural difference in punctuation between JIS (Japanese) and ISO (European) wire stripe notation?

◦ Your Answer:

2. Technical Problem Solving: A technician is working on a Ford vehicle (SAE standard) and finds a wire labeled 12 BLK. Another technician works on a Toyota (JIS standard) and finds a wire labeled 0.5 B. Which wire is thicker? Explain why based on the wire measurement units mentioned in the text!

◦ Your Answer:

