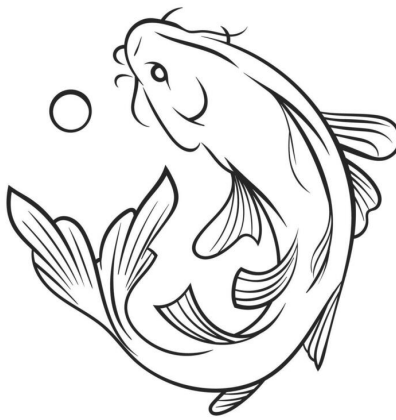**ENGINEERING SPECIFICATION DOCUMENT**

Vehicle Aesthetic, Interior & Livery Specification
Civic EF/EK AWD Time Attack Program

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Contents

1 Purpose

This document defines the **visual identity, interior design philosophy, and livery structure** for the AWD Civic EF/EK Time Attack program. It includes:

- OEM+ interior design with race-ready elements,
- intentional cage integration using CAD-designed filler panels,
- asymmetrical koi-themed livery with blue-based cultural elements,
- sponsor and brand representation using only parts installed on the vehicle,
- driver identity placement using professional motorsport conventions.

The objective is to produce a race vehicle that is both competitive and visually iconic, serving as a technical showcase and brand identity piece for future engineering opportunities, including motorsport engineering roles.

2 Interior Design Overview

2.1 Design Philosophy

The interior will follow an **OEM+ race aesthetic**:

- Factory-style cleanliness,
- Subtle race modifications,
- Custom integrations that appear intentional and production-like,
- Emphasis on professional fit and finish.

The goal is an interior that feels like Honda themselves produced a factory Time Attack edition.

2.2 Interior Components and Features

- **Quick-release steering wheel** with clean hub surround.
- **Fire extinguisher** mounted within driver reach, red or blue.
- **Custom floor mats** matching the livery color palette.
- **Custom switch panel** for ignition, pumps, and starter.
- **High-quality amplifier and subwoofer** for weight distribution and interior tone, tuned for deep, clean bass.

The interior must remain grounded, functional, and race-legal while preserving comfort and aesthetic integrity.

3 Cage Integration and Panel Modification

3.1 Factory-Style Cage Integration

To maintain an OEM+ appearance, the roll cage must visually blend into the interior.

- Panels will be cut cleanly along natural design lines.
- No exposed raw edges or accidental-looking notches.
- The final fit should appear as though the cage came factory-installed.

3.2 CAD-Designed Filler Panels

All interior gaps created by cage tube penetrations will be filled with custom CAD-designed inserts.

- Created via 3D scanning, measurement, and CAD modeling.
- 3D-printed or laser-cut from ABS, ASA, or aluminum.
- Texture-matched using vinyl wrap or surface finishing.
- Snap-in or screw-in design for serviceability.

These fillers ensure a seamless, intentional interior.

4 Interior Color and Material Palette

4.1 Primary Colors

- Matte black (factory plastics),
- Satin black (filler plates),
- Deep koi blue accents (consistent with exterior).

4.2 Optional Accent Materials

- OEM-grain vinyl wrap,
- Black alcantara inserts,
- Blue-stitched shift boot,
- Aluminum switchgear.

Interior must never appear cluttered; all accents must be minimal.

5 Livery Design Philosophy

5.1 Theme Overview

The livery follows a **koi-inspired flowing aesthetic**:

- asymmetrical patterning,
- blue-on-white color scheme,
- Japanese drift and time attack influences,
- fluid wave and koi linework replacing typical flame/dragon motifs.

The car must appear clean at a distance but reveal complexity up close.

5.2 Driver Identity

- Bold block-style motorsport font,
- Placed under driver-side door handle,
- Text: **K. Caldwell**,
- Blue fill, thin white stroke.

No social media handles or QR codes.

5.3 Cultural Elements

Blue-variant flags will be used:
- **Vietnamese flag**: blue background, white star.
- **Canadian flag**: blue background, white maple leaf.

Flags are positioned on rear quarter windows.

6 Asymmetrical Koi Livery Layout

6.1 Left Side

- Large koi sweeping across doors with flowing fins,
- Movement from rear to front conveying upward motion,
- Subtle wave patterns over fender and side skirt.

6.2 Right Side

- Smaller koi or just wave patterning,
- More minimal layout,
- Allows sponsor stack to stand out clearly.

Figure 1: Initial Concept Rendering – Asymmetrical Blue Koi Livery

6.3 Front and Rear

- Front receives minimal wave accents,
- Rear features a fin-tail motif around diffuser line.

7 Sponsor and Brand Integration

7.1 Philosophy

Only brands and shops genuinely used in the vehicle build will be displayed.

7.2 Primary Placement Zones

- **Side skirt**: suspension, drivetrain, ECU.
- **Front fender**: smaller technical suppliers.
- **Rear quarter**: fabrication or machine shop credits.
- **Rear bumper**: exhaust/fabrication brand placement.
  All logos must be blue and white only.

8 Body Kit and Aero Integration

The aero package will be designed to blend with the koi aesthetic while remaining functional.
- Custom front bumper with integrated side flicks,
- Rear bumper cut for diffuser fitment,
- Large rear wing with blue/white endplates,
- Side skirts shaped to match livery flow.

9 Interior and Livery System Integration

- Interior blue accents must match exterior blue saturation,
- Floor mats may include subtle koi stitching or wave motifs,
- All colors must fall within the same palette for cohesion.

10 Future Revisions

- Add full livery renderings (CAD or vector),
- Add interior renders or final CAD filler panel drawings,
- Update sponsor list as more parts are finalized,
- Add placement diagrams for vinyl cutting.