

TECHNICAL PUBLICATION SERVICES  
ENGINEERING & TESTING SERVICES

## **LARGE VEHICLE/ HEAVY EQUIPMENT**

As equipment functionality and performance have rapidly evolved, so have the demands for safety standards, supporting documentation, reliable equipment performance, and operational life expectancies.

**DTB provides the resources  
you need to crush it.**

We're There.



**dtb.com**



Teardown facility at DTB

# LARGE VEHICLE/ HEAVY EQUIPMENT

## Technical Publication Services

Dayton T. Brown, Inc. (DTB) develops technical manuals for all facets of the heavy equipment industry. Regardless of the size or complexity of your vehicle or equipment, DTB's team of documentation experts will analyze your requirements, assimilate and analyze all of the source data, and develop technical manuals that complement the maintenance and performance for servicing your heavy equipment. We also have available space for a tear-down facility for equipment analysis and technical manual validation, or we can perform these activities as part of your production line.

Our team of technical writers, illustrators, engineers, programmers, analysts, logisticians, and data specialists deliver world-class technical publications, logistics analysis, and training courseware / curriculum development tailored to meet your product support needs. We are experts across the spectrum of mechanical, electrical, hydraulic systems, and equipment. Drawing from our team of technical writing, data conversion, and graphics experts, we can produce technical publications and logistics deliverables - prepared for today's sophisticated requirements.

### Technical Manual and Logistics Services

DTB produces comprehensive technical manuals and logistics services. This includes:

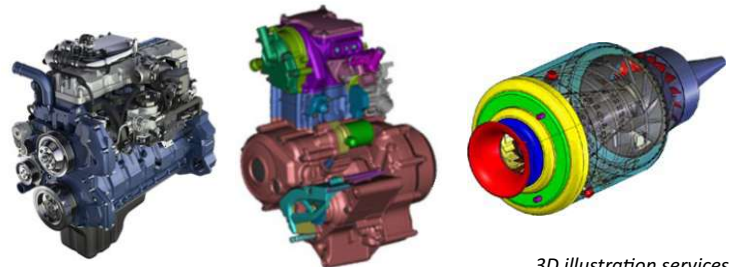
- Operator Guides
- Illustrated Parts (IPB/IPC/IPL/IPD/RPSTL)
- Wiring Diagram Manual (WDM)
- Fault Isolation & Troubleshooting Manuals (FIM/TSM)
- Repair Manual
- Service Bulletins (SB)
- Logistics Maintenance Planning/Product Support Analysis
  - Provisioning
- Training, Safety, & System Documentation
- Interactive Electronic Technical Manuals/Publications (IETM/IETP)
- Revision Services
- Legacy Conversion

### Defining the Specification Requirements

We are experts in commercial and military standards and specifications for technical documentation development. We will work directly with you to determine your needs in order to make your project successful and comply with specification requirements.

We specialize in the following areas:

- All Military Standards, including MIL-STD-40051
- S1000D – All Issues (Revisions)



3D illustration services

To discuss your project and get a schedule and price quotation, please direct inquiries to:

**Tel: (631) 316-1916 or email: [contactus@dtb.com](mailto:contactus@dtb.com)**



Testing for all environments



# LARGE VEHICLE/ HEAVY EQUIPMENT

## Engineering & Testing Services

DTB's heavy equipment /automotive testing group can assist you with your validation, verification, and durability efforts of systems, subsystems, or components. We support Tier 1 and Tier 2 customers in the heavy equipment /automotive industry and provide engineering services and test directly to automotive OEMs. We routinely test to SAE, ISO, QS, CISPR, and MIL standards. Engineering and test expertise includes:

### Engineering and Analysis

- Loads and spectrum development
- Finite element analysis
- Test plan / procedure development
- Source identification and development
- Reverse/reengineering programs
- Fatigue and crack propagation analysis

### Testing

- Shock
- Vibration
- Humidity
- Salt Fog
- Sand & Dust
- High/Low Temperature
- Immersion
- Electrical Testing
- Indirect Lightning
- Shielding Effectiveness
- EMI/EMC
- Power Testing
- Combined Environments

### Inspection/Failure Analysis

- Scanning electron microscopy
- Kevex energy dispersive spectroscopy
- Image analysis
- Fractographic analysis
- Metallography
- Digital photography
- Mechanical properties evaluation
- Corrosion analysis and testing
- Arc-emission spectrometry
- Coating analysis/selection
- Nondestructive testing

### Dimensional Inspection Laboratory

- CMMs
- FARO arm
- Surface finish
- Digitization of part surfaces
- Contour measurement
- Gear testing
- Coating evaluation

### Vehicle Instrumentation

DTB offers full vehicle instrumentation development for mule and R&D automotive testing, which includes conventional IC vehicles, as well as hybrid and electric vehicles.

### Instrumentation and Data Acquisition

- Strain gauging
- Crack wires
- Deflection measurements
- Load measurements
- Servo controlled fatigue/static load application
- Automated real time data acquisition
- Electrical/electronic parameter acquisition
- Data acquisition during environmental exposure



Self-sufficient, Forward Operating Base SCIFs for advanced and remote deployments



EMI/EMC Testing



Environmental Sand & Dust Testing



EMI/EMC Semi-Anechoic Testing Chamber

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Dayton T. Brown, Inc. contributes to your mission by leveraging more than 70 years of experience to offer comprehensive engineering services, testing, logistics, technical publications, and military mission systems services. Through communication and teamwork, we are an extension of your engineering team with a thorough understanding of product life cycle needs and customer requirements. Our engineers and technicians tackle challenges and find solutions to tough problems, producing the results you need to stay on schedule.

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