

AORSI Instructor Guide

Course Title: Vehicle Inspections & Preventative Maintenance (INSP)

Duration: 6 Hours (classroom + shop)

Audience: Off-road operators, technicians, and instructors

Course Overview

This course prepares operators and trainers to maintain vehicles through preventative care and standardized inspection routines. Participants will learn systematic approaches to pre-ride, post-ride, and seasonal inspections, fluid checks, wear part evaluation, and long-term storage practices. Strong inspection and record-keeping habits improve reliability, safety, and vehicle lifespan.

Learning Objectives (Instructor Notes)

- Perform pre-ride, post-ride, and seasonal inspections. (Tip: Provide standardized checklists).
- Identify critical wear parts and maintenance intervals. (Tip: Use visual comparison activities).
- Conduct fluid checks and replacements correctly. (Tip: Provide degraded vs clean samples).
- Establish routine preventative maintenance programs. (Tip: Teach logbook and tracking systems).

Module 1: Inspection Checklists – Daily & Seasonal (1.5 hours)

- Teach daily, post-ride, and seasonal inspection routines.
- Course Design Suggestion: Peer-to-peer inspections with mock forms.
- Exercise: Complete a pre-ride inspection sheet.
- Reflection: Why are seasonal inspections as important as daily checks?

Module 2: Fluids – Oil, Coolant, Brake, Transmission, Differential (1.5 hours)

- Teach proper checks and replacement of fluids.
- Course Design Suggestion: Shop-based rotation checking fluids.
- Exercise: Document fluid inspection results for three systems.
- Reflection: How does improper fluid maintenance shorten vehicle life?

Module 3: Wear Parts – Belts, Filters, Hoses, Bearings (1.5 hours)

- Teach identification and replacement of wear parts.
- Course Design Suggestion: Inspect and replace sample filter or belt.
- Exercise: List five indicators of wear in hoses and belts.
- Reflection: Why is proactive replacement cost-effective?

Module 4: Long-Term Storage & Maintenance Records (1.5 hours)

- Teach seasonal storage, fuel stabilization, battery care, and record-keeping.
- Course Design Suggestion: Draft storage plan for fleet vehicle.
- Exercise: Fill out mock maintenance record.
- Reflection: How does good record-keeping improve reliability?

Instructor-Student Alignment Chart

This chart aligns instructor activities with student workbook exercises for easy reference.

Module	Instructor Focus	Student Workbook Activity
1: Inspection Checklists	Teach daily/seasonal inspections with checklists	Complete pre-ride inspection form
2: Fluids	Demonstrate fluid checks with samples	Document fluid inspection results
3: Wear Parts	Show worn vs new parts, tolerance measuremen	t List indicators of hose/belt wear
4: Storage & Records	Explain storage plans and maintenance logs	Fill out mock maintenance record

Final Assessment

Task: Complete a full sample inspection of a vehicle and prepare a mock maintenance log covering daily, seasonal, and long-term storage entries. Written exam includes questions on inspections, fluids, wear parts, and record-keeping.

Instructor Preparation Checklist

- Provide standardized inspection sheets.
- Collect fluid samples (clean vs degraded).
- Prepare worn vs new belts, filters, hoses for comparison.
- Set up sample maintenance logs and storage plans.

Suggested Timing

- Introduction 10 min
- Module 1 90 min
- Module 2 90 min
- Module 3 90 min
- Module 4 90 min
- Final Assessment 30 min
- Wrap-up & Questions 10 min