

Worksheet HW02 & Training Record

Skid-Steer Vehicle Maintenance

Hydraulic Projects

Email:

Course:

Provider:

Expected Outcomes: (1-2 hours)

1. Identify potential failure points within hydraulic systems.
2. Understand how to reduce risk and repair typical faults.
3. Practice identifying the causes of hydraulic system failures.

Previous Knowledge Required:

Students should have already completed HW01 'Skid-steer operation' worksheet. A better understanding will be gained if students have already studied the introduction, fundamentals, component, and maintenance sections.

Terminology:

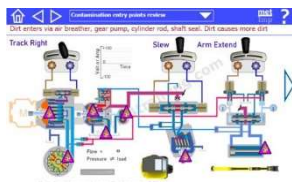
Closed-circuit, hydrostatic drive, planned maintenance, fluid contamination, risks, variable displacement pumps.

Record of Achievement:



Click the mail icon to post your results, once training is complete. Enter your unique username and LRS endpoint details. Also, record your progress on this training record sheet and retain along with all written coursework assignments. See www.e4training.com/xapi/ for information on the automatic record stores.

Coursework investigations



Study the detailed information and instructional video at www.e4training.com/hydraulic_projects/skidmaint1.php & 2.php

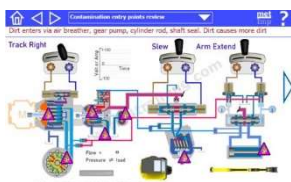
Key points include:

- Key performance and reliability issues.
- Maintenance checks and potential faults.
- How to diagnose failures.

Dates & durations:

Complete

Virtual test rig experiments



Experiment with the skid-steer excavator simulation

www.e4training.com/hydraulic_projects/skidmaint3.php?system

- Explore and identify potential maintenance issues.
- Explore and identify potential risk points.

Follow the suggested exercises and observations list below the simulation.

App date & duration

Post when complete



Experiment with the hydrostatic drive system

www.e4training.com/hydraulic_projects/skidmaint3.php?circuit

- Demonstrate how to measure and test different components.
- Follow daily and planned maintenance procedures.
- Diagnose faults using standard test equipment

Follow the suggested exercises and observations list below the simulation.

App date & duration

Post when complete

Key questions / Plenary

Can you describe the most likely cause of a hydraulic component failure?
What is required before any work is carried out on a hydraulic system?
What might you check with a non-contact digital thermometer?

Repeat above if the answer is no

And Finally:

Complete this worksheet and keep for your records. Submit any written coursework etc. to your training course provider.

Follow-on Course Worksheets:

Potential follow-on worksheets include:

HM03 – Maintenance procedures or HM04 – Hydraulic troubleshooting

Or refer to your individual lesson plan or search the worksheet lists at www.e4training.com/hydraulic_courses/worksheets1.php or [courses1.php](http://www.e4training.com/hydraulic_courses/courses1.php)