Power Trains Project Worksheet
(Differentials)

Name_______________________

Component make and model:

Recommended Lubricant:

Books, Resources, and Service Manuals Used For Project:

Verbally Describe Overhaul Procedure To Instructor (How are carrier bearing and pinion bearing preload obtained? How is pinion depth adjusted?):
INSTRUCTOR SIGNATURE______________________________

Backlash Specification:

Actual Backlash Before Disassembly (show instructor)
INSTRUCTOR SIGNATURE______________________________

Ring Gear Run-out Specification

Actual Ring Gear Run-out:
INSTRUCTOR SIGNATURE______________________________

Pinion Shaft Rolling Torque Specification:_________________

Actual Pinion Shaft Rolling Torque (carrier removed):
INSTRUCTOR SIGNATURE______________________________
Inspection checklist (O.K. or Replace)

Housing condition (cracks, wear) __________
Pinion shaft splines __________
Pinion shaft threads __________
Bearing journals __________
Drive yoke __________
Gear tooth condition __________
Pinion shaft bearings __________
Ring gear tooth wear __________
Side gear tooth wear __________
Side gear splines __________
Differential pinion (spider gear) tooth wear __________
Differential pinion thrust surface wear __________
Differential pinion bore wear __________
Cross shaft wear __________
Side bearings __________
Side bearing caps __________
Carrier damage __________

Parts Recommended for Replacement (show instructor and describe damage) List parts below.

INSTRUCTOR SIGNATURE_____________________________

Pinion Rolling Torque After Assembly:
INSTRUCTOR SIGNATURE_____________________________

Backlash After Assembly:
INSTRUCTOR SIGNATURE_____________________________

Gear Tooth Pattern Analysis (describe pattern and determine acceptability)
INSTRUCTOR SIGNATURE_____________________________