Jefferson Lab

THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY
12000 Jefferson Avenue
Newport News, VA 23606

HALL B PROCEDURE NO.:
B000000400 –P008 Rev - 0

TITLE: **Hall B Solenoid Pre-Power-Up Vapor-Cooled Leads Checkout Procedure**

BY: R. Fair
Intended Checker and Approvers:
CHK: P. Ghoshal
1. APP: R. Rajput-Ghoshal

DATE: 01 / 31 / 2017

Completed
7/14/2020
Rajput-Ghoshal

REV.	ECO#	DESCRIPTION	BY	CHK.	APP.	APP.	DATE

SUMMARY OF CHANGES FROM PREVIOUS REVISION:

Introduction

The checklist below should be completed only in conjunction with the most current release of the B000000400 P002 Hall B Solenoid Operations Power Up Checklists.

This document refers to the Vapor-Cooled Leads connecting the Water-Cooled Leads on the Solenoid Service Tower to the Solenoid magnet.

Checklist

Hall B Solenoid
Pre-Power-Up Vapor-Cooled Leads Checkout Procedure

Date 7/14/2020

Indicate relevant items requiring check below!

Relevant Item:	Checked By/Date	Verified By/Date	
✓	PKG 7/14/2020	PC 7/14/20	1. Have the lead flows for EACH Vapor-Cooled Lead been calibrated and programmed. Check that the lead flow rate is higher than 42 SLPM. Lead flow for VCL1 lead 49.7 SLPM Date 7/14/20 Lead flow for VCL2 lead 49.2 SLPM Date 7/14/20
N/A			2. Check that EACH of the Vapor-Cooled Lead heaters have been turned ON and have been set to temperature. Set the temperature to approximately 24°C (75 F) for all the heaters Set temp for VCL1 lead Heater Set #1 _____°C Date_____ Heater Set #2 _____°C Date_____ Heater Set #3 _____°C Date_____ Set temp for VCL2 lead Heater Set #1_____°C Date_____ Heater Set #2 _____°C Date_____ Heater Set #3 _____°C Date_____ Note: As necessary adjust the heater temperature settings to prevent condensation and ice on any of the flanges.

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N/A			3. Check that the G10 electrical isolation plates have been installed correctly between the two Vapor-Cooled Leads and in-between each lead and the lead gas exhaust port. (Ref. Drawing No. B00000-04-00-0003 and the figures below)	No seal/ multimeter check for Isolation >2MΩ
N/A			4. Check that the electrical isolation box at the Solenoid Service Tower end has been installed correctly. (Ref. Drawing No. B00000-04-00-0003 and the figures below)	No seal. multimeter check for isolation >2MΩ
✓	7/14/2020 PKT	7/14/20 PG.	5. Make sure that manual valves MV8621A and B are open	
N/A			6. Make sure that the vent solenoid valve SV8622 is operational	
VAPOR-COOLED LEAD CHECKS COMPLETE				

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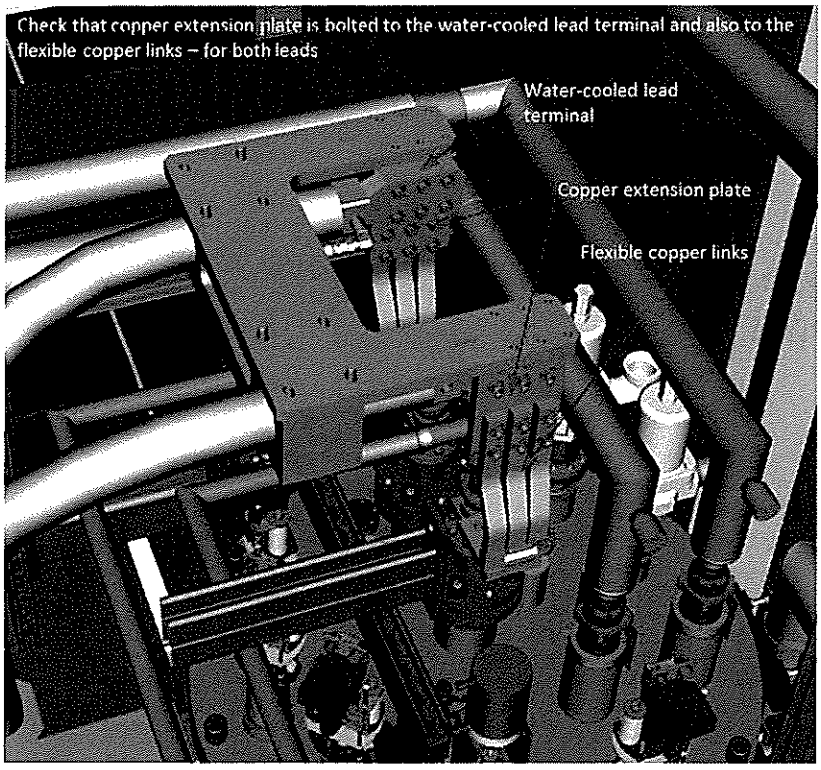
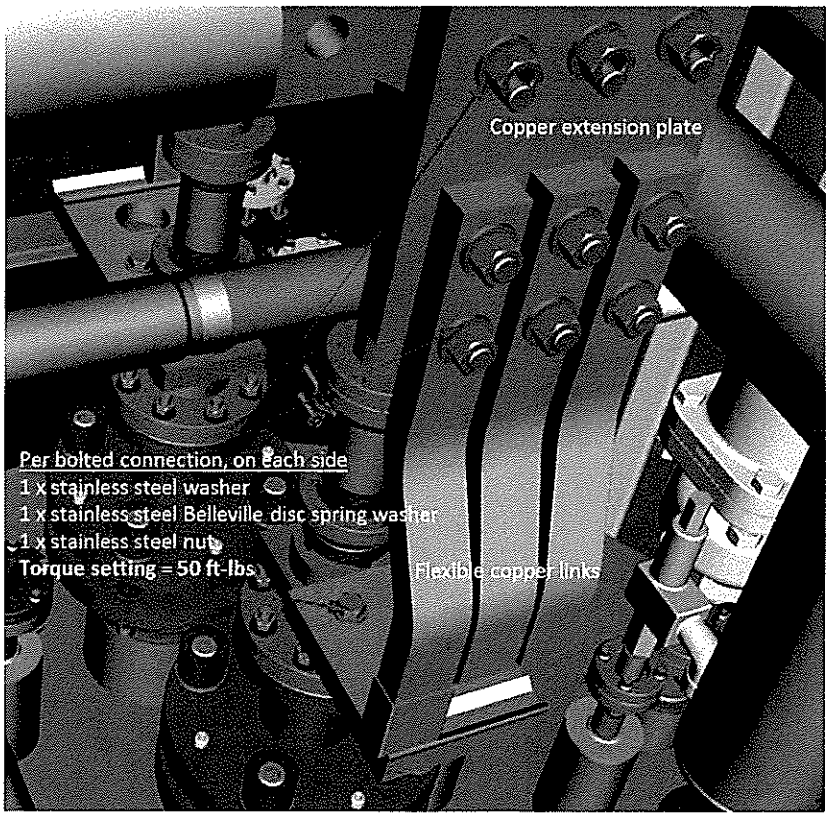
Screen Shots of Installed Leads





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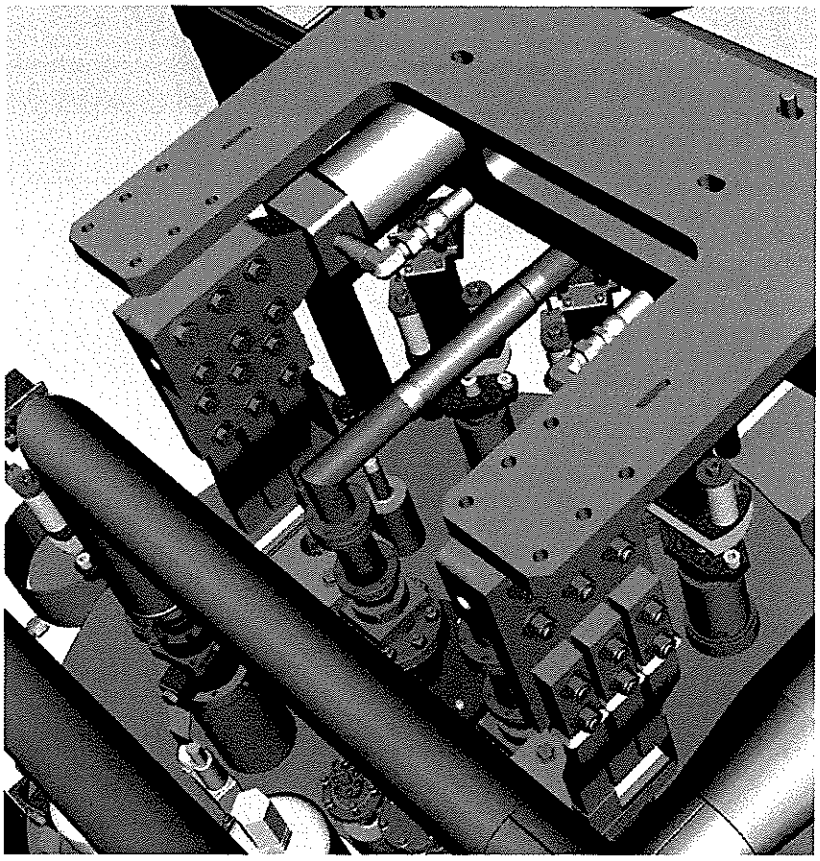

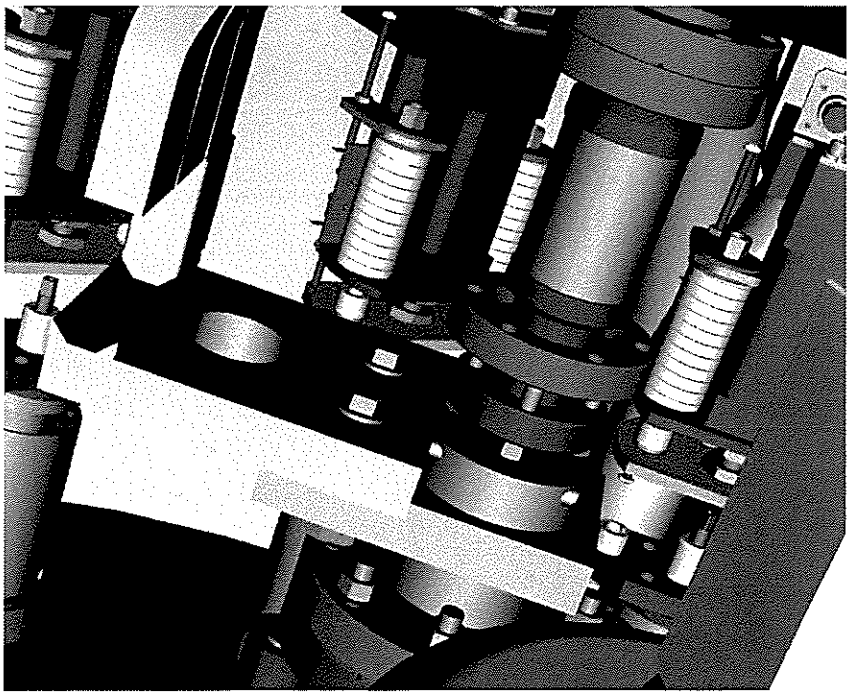

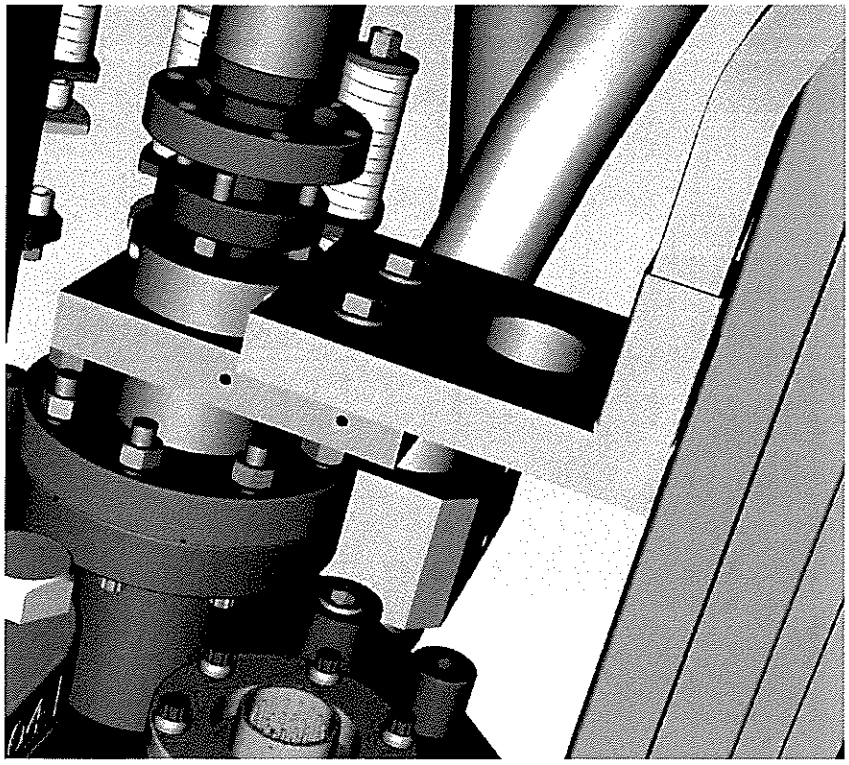

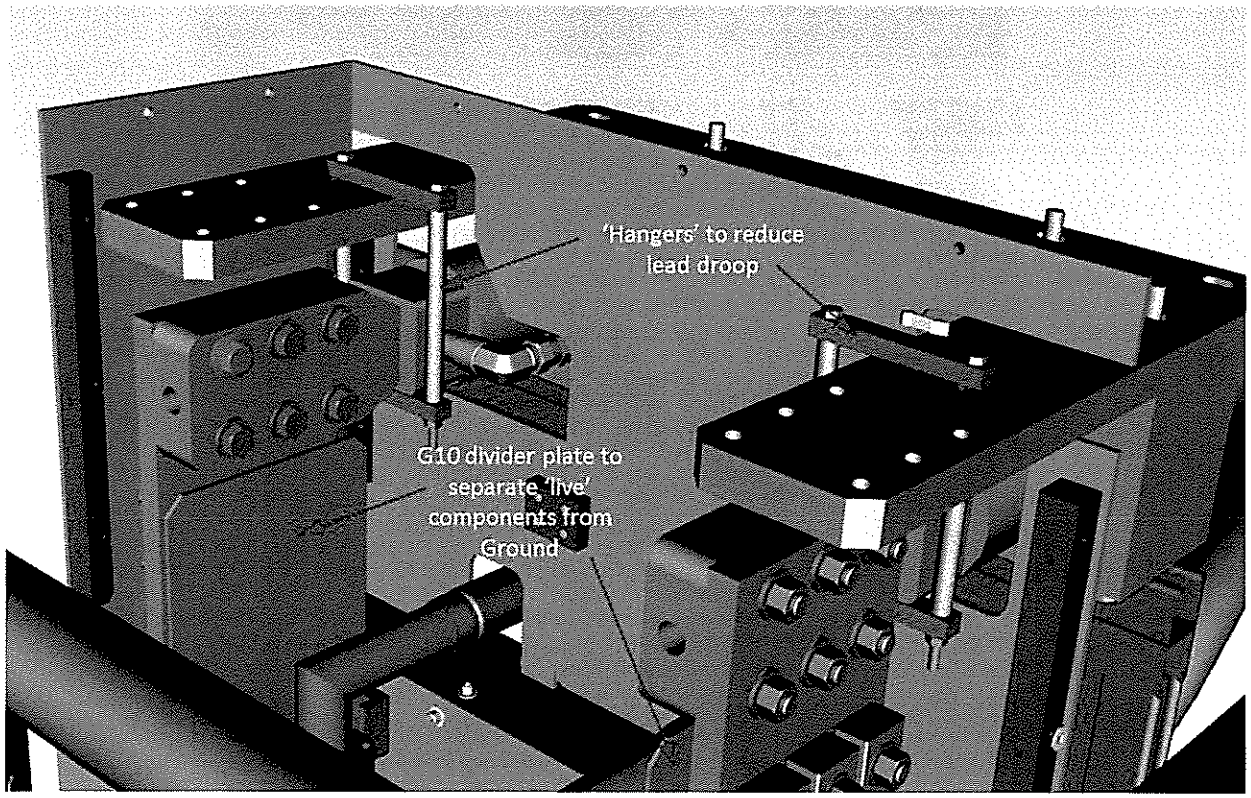

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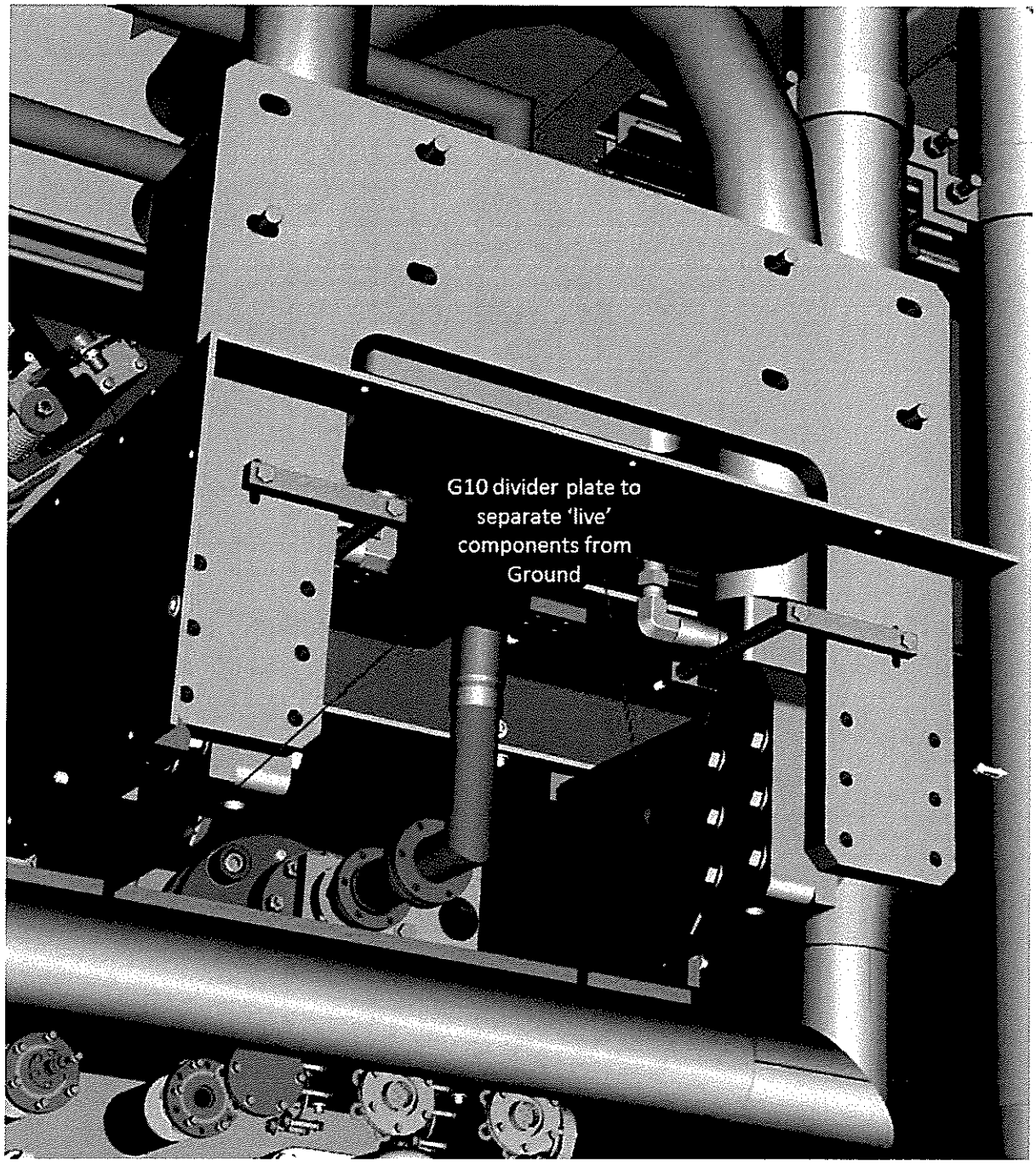

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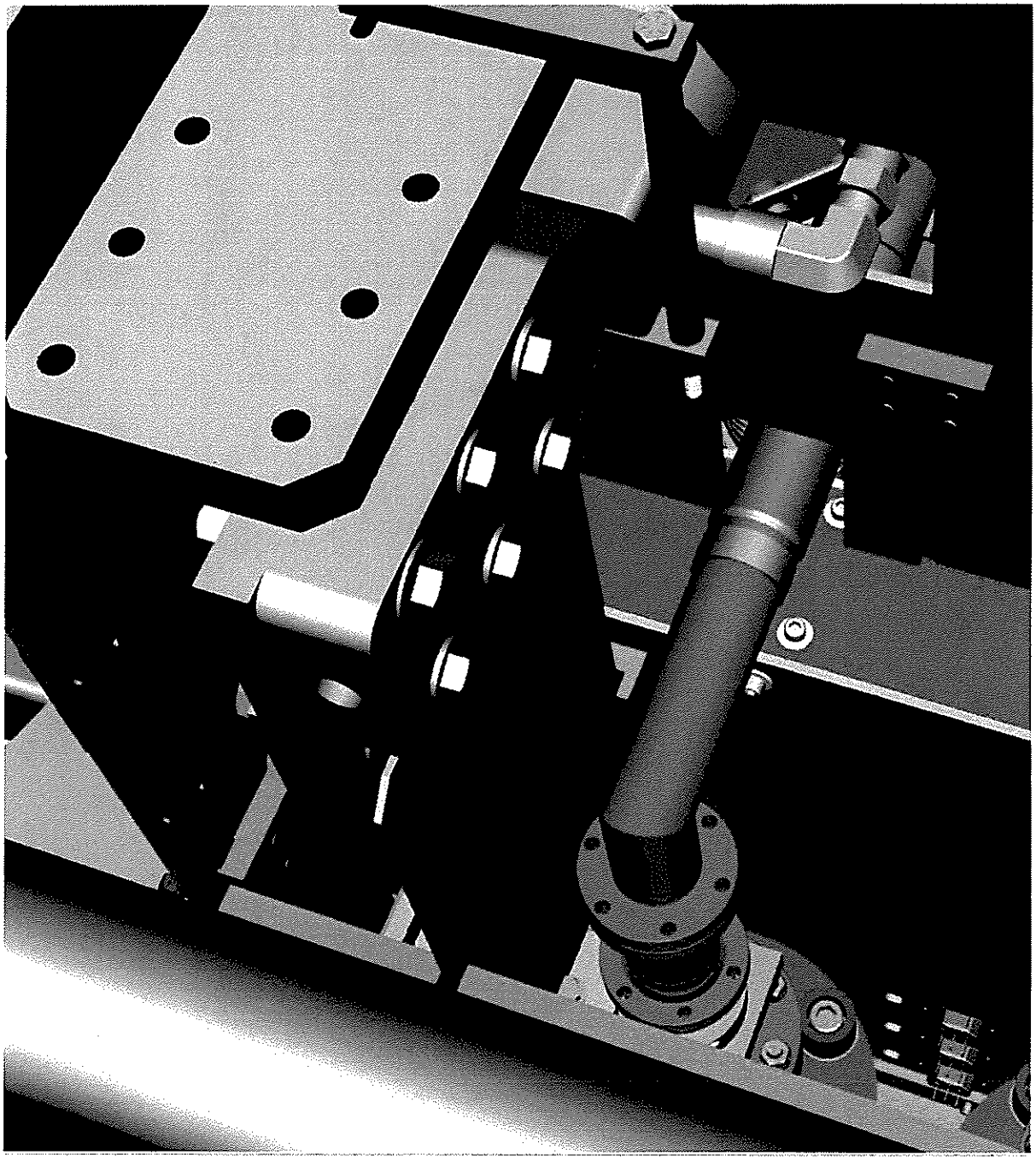

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