YASKAWA
MOTOMAN ROBOTICS

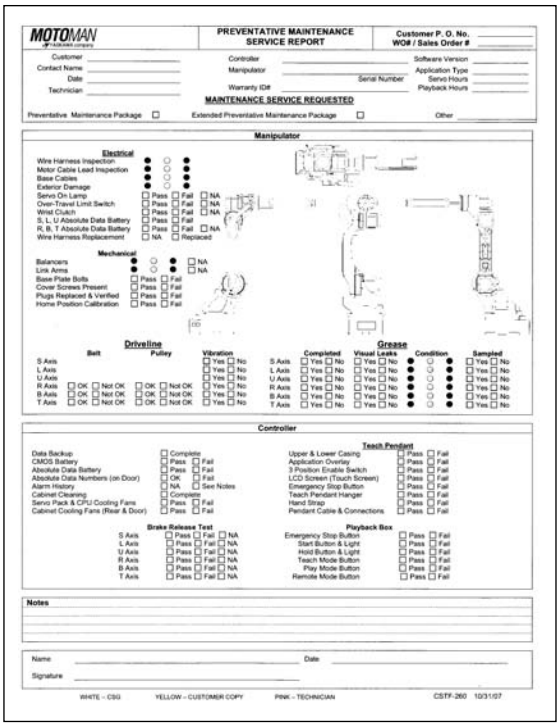
Preventive Maintenance Service Plan

The Motoman® Preventive Maintenance Service Plan is designed to augment customers with a preventive maintenance strategy. The Preventive Maintenance Service Plan can help identify impending performance issues with robots in production to ensure that they are addressed before affecting production downtime.

Plan Includes

- PM checklist will be submitted to customer at time of service.
- Complete inspection of manipulator and controller.
- Monitor robot in normal production.
- Perform grease analysis testing.
- Lubrication of manipulator.
- Inspection of internal wiring harness.
- Provide reports on grease analysis and preventive maintenance performed, along with recommendations for the continued performance of robots in production.

Preventive Maintenance & Grease Analysis Report Examples


MOTOMAN

PREVENTATIVE MAINTENANCE SERVICE REPORT

Customer P. O. No.
WO# / Sales Order #

Customer
Contact Name
Date
Technician

Controller
Manipulator
Serial Number
Warranty ID#

Software Version
Application Type
Servo Hours
Playback Hours

MAINTENANCE SERVICE REQUESTED

Preventative Maintenance Package ☐ Extended Preventative Maintenance Package ☐ Other

Manipulator

Electrical
Wire Harness Inspection
Motor Cable Lead Inspection
Base Cables
Exterior Damage
Servo On Lamp
Over-Travel Limit Switch
Wrist Clutch
S, L, U Absolute Data Battery
R, B, T Absolute Data Battery
Wire Harness Replacement

Mechanical
Balancers
Link Arms
Base Plate Bolts
Cover Screws Present
Plugs Replaced & Verified
Home Position Calibration

Driveline
Belt
Pulley
Vibration
S Axis
L Axis
U Axis
R Axis
B Axis
T Axis

Grease
Completed
Visual Leaks
Condition
Sampled

Controller

Data Backup
CMOS Battery
Absolute Data Battery
Absolute Data Numbers (on Door)
Alarm History
Cabinet Cleaning
Servo Pack & CPU Cooling Fans
Cabinet Cooling Fans (Rear & Door)

Teach Pendant
Upper & Lower Casing
Application Overlay
3 Position Enable Switch
LCD Screen (Touch Screen)
Emergency Stop Button
Teach Pendant Hanger
Hand Strap
Pendant Cable & Connections

Brake Release Test
S Axis
L Axis
U Axis
R Axis
B Axis
T Axis

Playback Box
Emergency Stop Button
Start Button & Light
Hold Button & Light
Teach Mode Button
Play Mode Button
Remote Mode Button

Notes

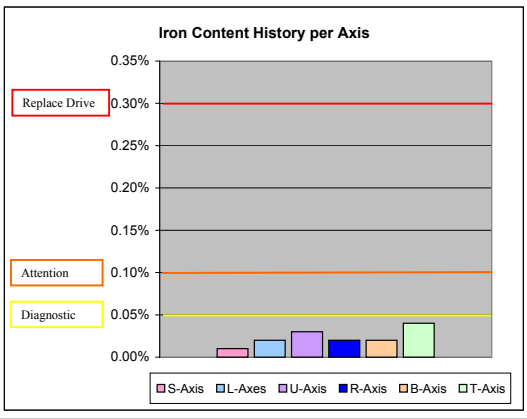
Name
Signature
Date

WHITE – CSG YELLOW – CUSTOMER COPY PINK – TECHNICIAN CSTF-260 10/31/07

Motoman Inc.
Grease Analysis Report

Customer	John Doe Corp
Case #	66666
Robot Model #	YR-UP350-A00
Robot Serial #	N/A

PM Date	12/13/2008		
Servo Hours	30000	**Recommendations**	
AXIS	**Weight %**	**Judgement**	**Counter Measure**
1: S	0.01	Within Normal Range	Continue current grease management practices
2: L	0.02	Within Normal Range	Continue current grease management practices
3: U	0.03	Within Normal Range	Continue current grease management practices
4: R	0.02	Within Normal Range	Continue current grease management practices
5: B	0.02	Within Normal Range	Continue current grease management practices
6: T	0.04	Within Normal Range	Continue current grease management practices



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