

# 작업공정사진철

고객명:

공사명: AC VECTOR SPINDLE MOTOR OVERHAUL

규격: 1PH7-186 67KW 1000~1350, MAX 5000RPM

REPAIR 내역: 분해 및 불순물 CLEANSING DRYING  
INSULATING VARNISH DIPPING DRYING  
양측 HOUSING METALLIZING 연마  
ENCODER 물 유입으로 교환  
SMI MODULE 소손으로 교환  
BEARING교환  
출고검사 시운전 TEST



<http://jinyangmotor.com/>

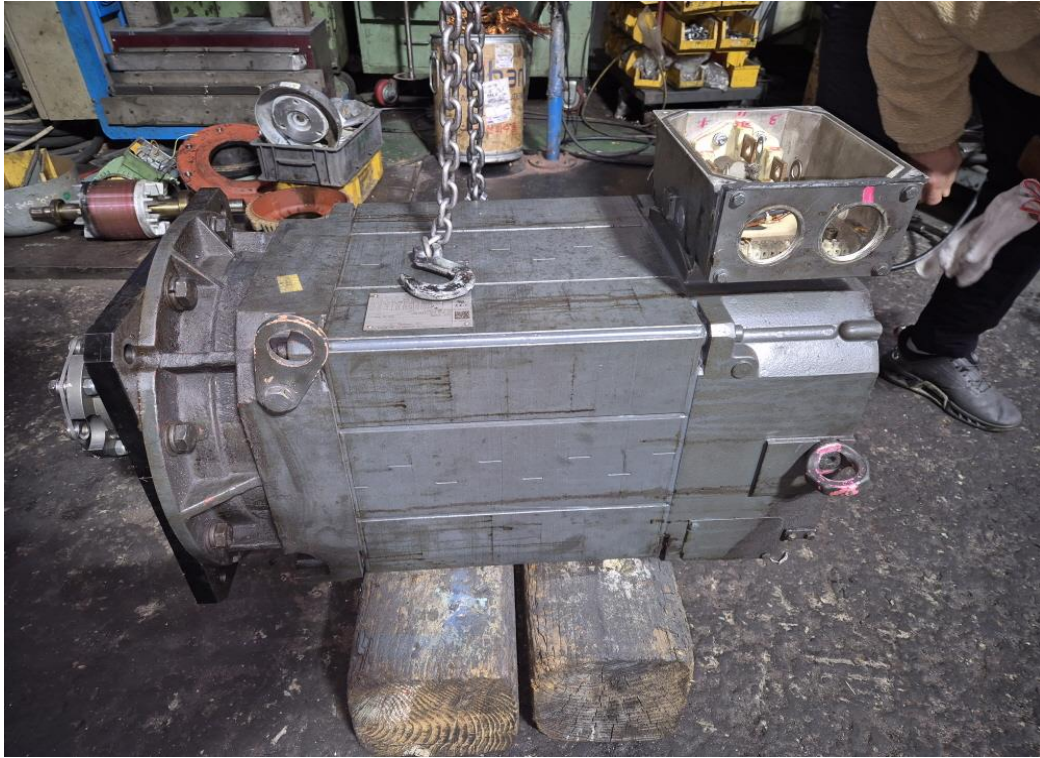


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작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사

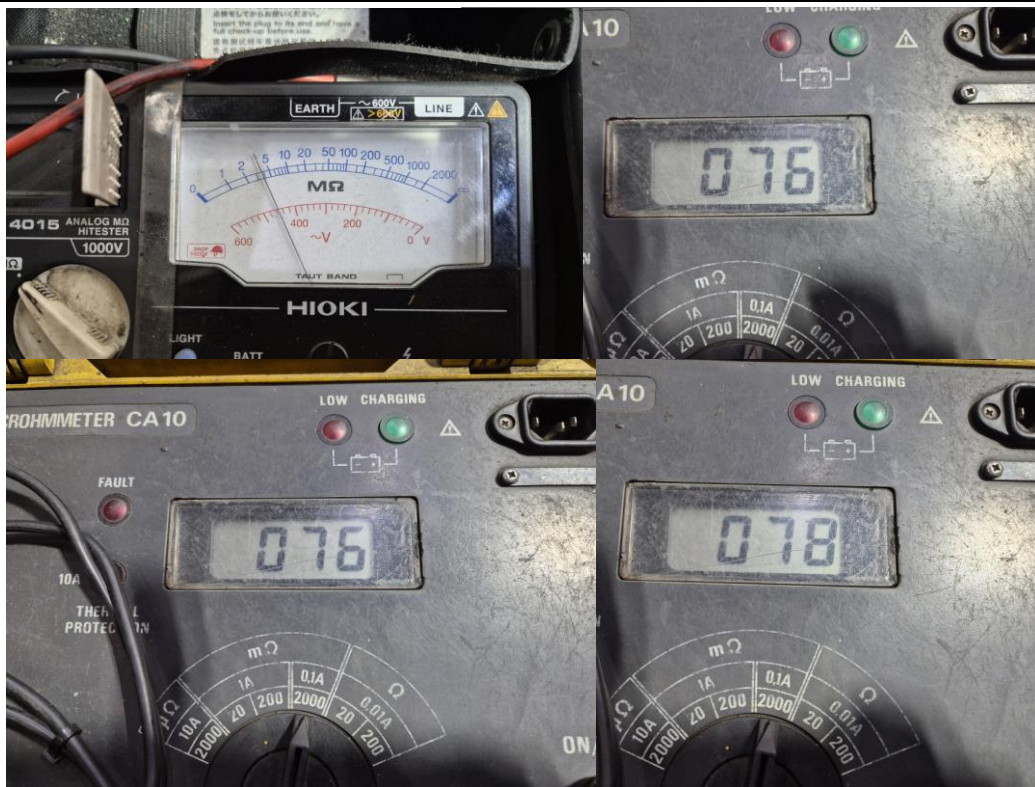


Ass'y

분해 전

작업공정

AC SPINDLE MOTOR 입고검사



권선검사

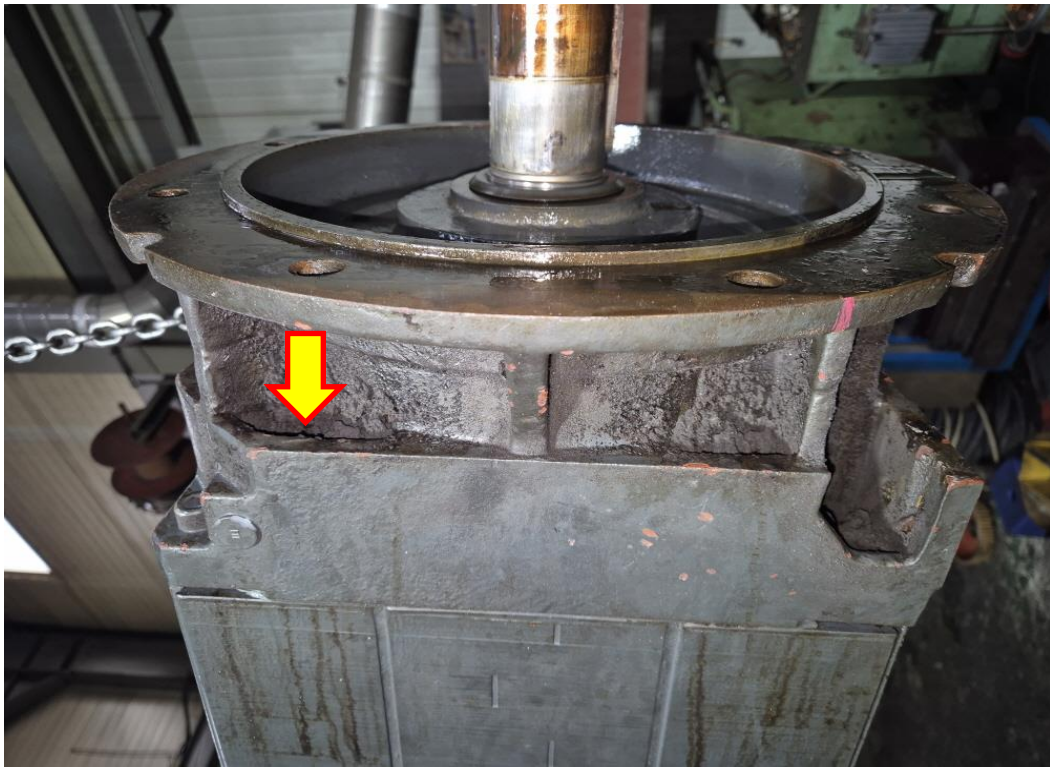
절연저항 & 각상별 권선저항

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작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사

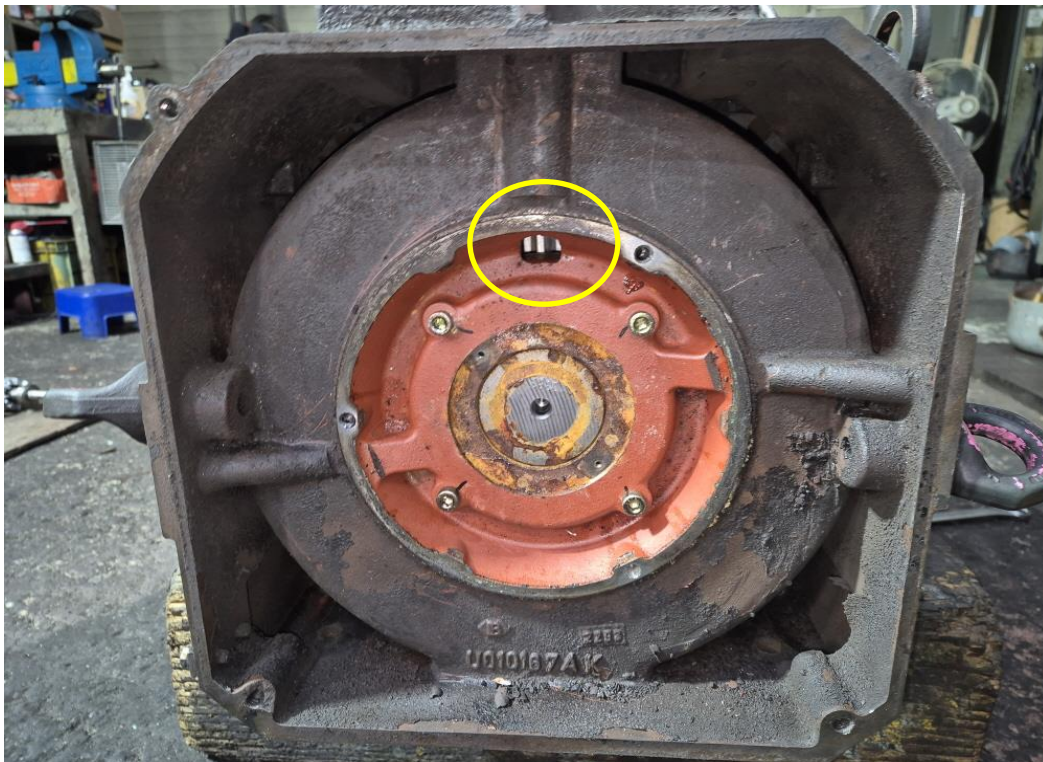


냉각구

냉각 흡입구 막힘

작업공정

AC SPINDLE MOTOR 입고검사



분해전

POWER BOX에서 ENCODER CABLE HOLE로 물이 유입되는 경로 로 예상 추정됨

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# 작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사

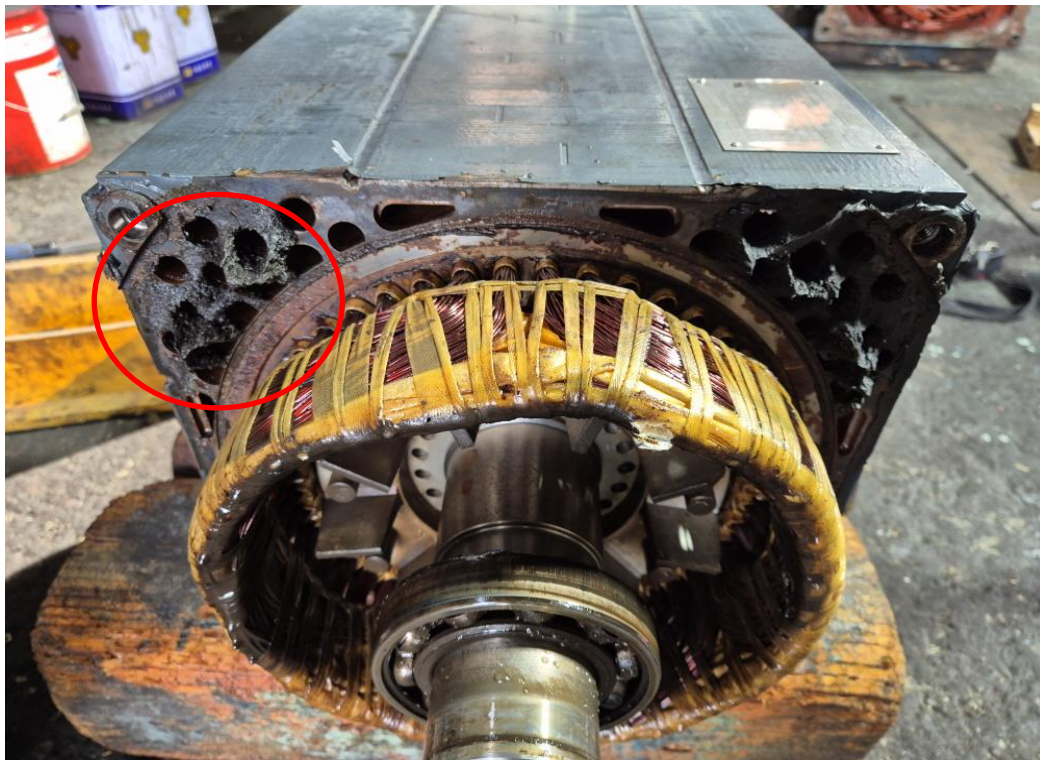


Ass'y 분해전

냉각구 및 권체 스팀세척 실시

작업공정

AC SPINDLE MOTOR 입고검사



STATOR 권체

분해 실시

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작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사

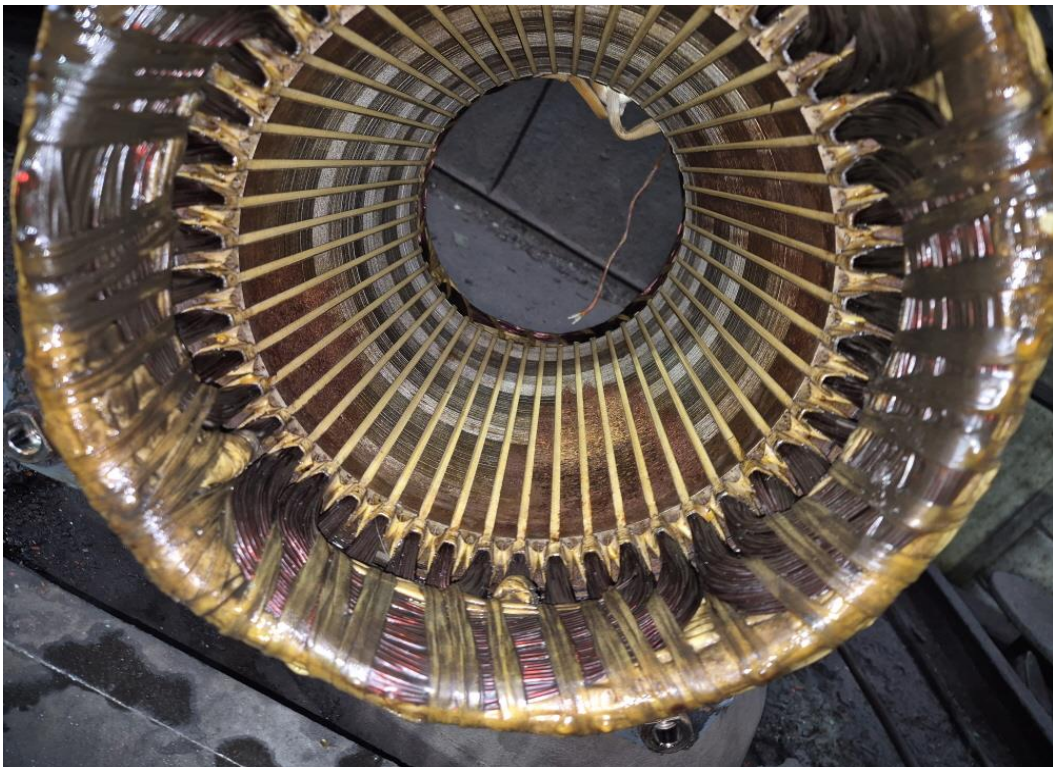


BEARING부

GREASE 말라 없음

작업공정

AC SPINDLE MOTOR 입고검사



STATOR 권체

권선상태 양호하나 물 유입이 있었던 것으로 보임

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# 작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사



ROTOR

MOTOR 내부로 물 유입이 있었던 것으로 보임



작업공정

AC SPINDLE MOTOR 입고검사



BRACKET

부하측 HOUSING 측정치 10/100으로 불량

JIN YANG	작업 공정 사진
작업공정	AC SPINDLE MOTOR 입고검사
	
BRACKET	반 부하측 HOUSING 측정치 5/100로 불량
작업공정	AC SPINDLE MOTOR OVERHAUL
	
STATOR 권체	권선 및 냉각구 세척 실시

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작업 공정 사진

작업공정

AC SPINDLE MOTOR 입고검사



STATOR 권체

세척 후 건조실시

작업공정

AC SPINDLE MOTOR OVERHAUL



BRACKET

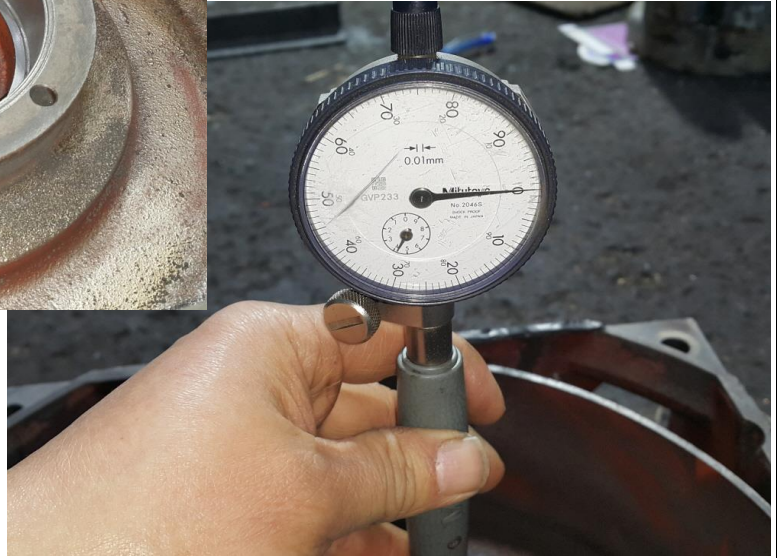
부하측 HOUSING METALLIZING 연마 후 검사 0/100

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작업 공정 사진

작업공정

AC SPINDLE MOTOR OVERHAUL



BRACKET

반 부하측 HOUSING METALLIZING 연마 후 검사 0/100

작업공정

AC SPINDLE MOTOR OVERHAUL



ROTOR

녹제거 및 방청도장 실시

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# 작업 공정 사진

작업공정

AC SPINDLE MOTOR OVERHAUL

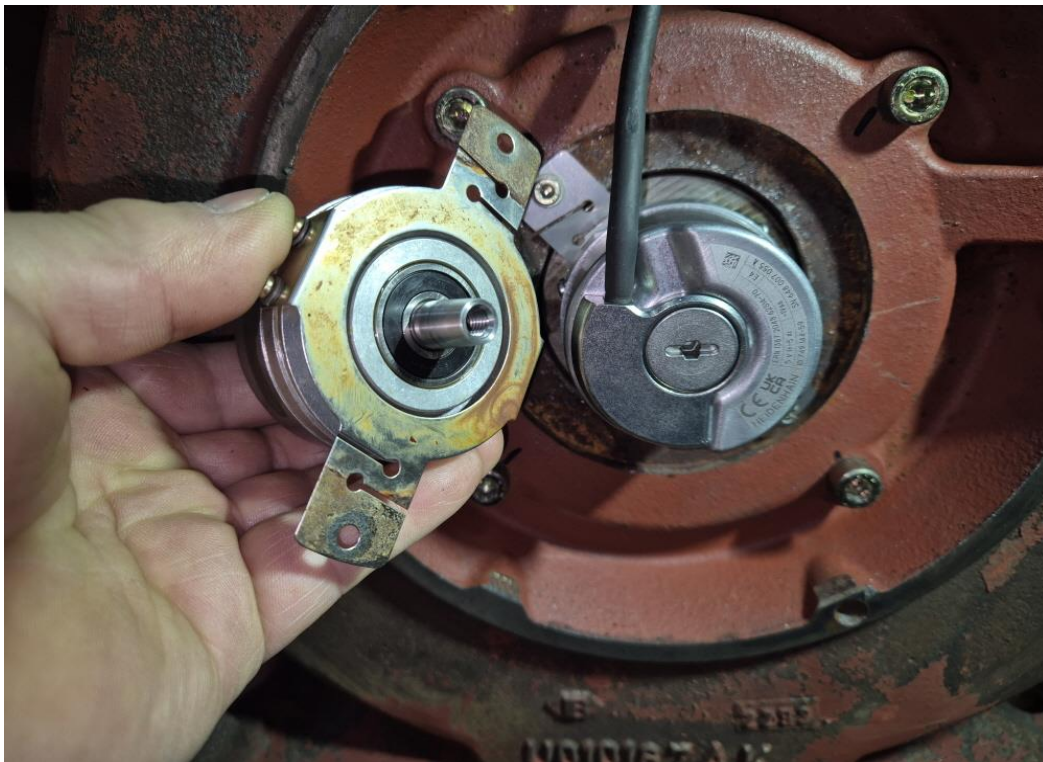


소모부품

BEARING교환 조립실시

작업공정

AC SPINDLE MOTOR OVERHAUL



ENCODER

물 유입으로 교환

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작업 공정 사진

작업공정

AC SPINDLE MOTOR OVERHAUL

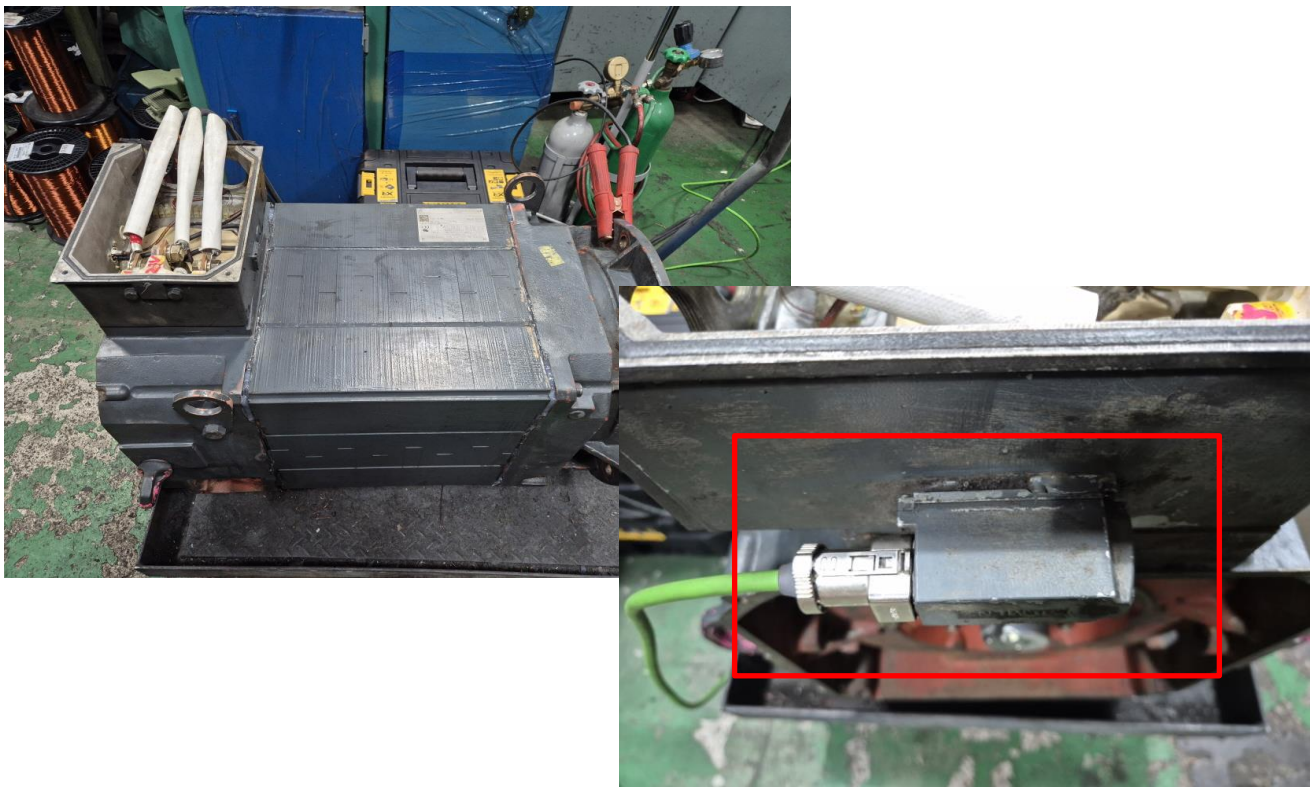


출고검사

절연저항 & 각 상별 권선저항

작업공정

AC SPINDLE MOTOR OVERHAUL



시운전 TEST실시

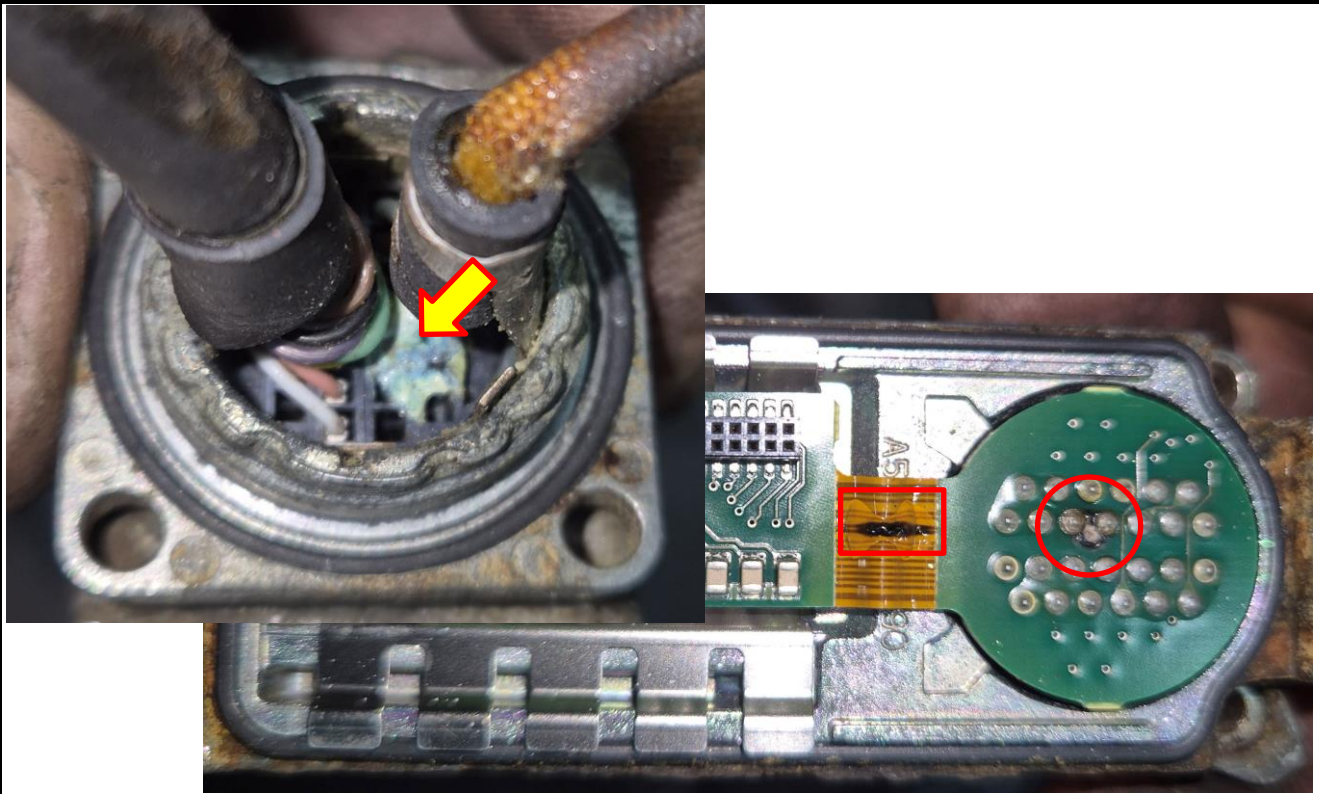
SMI MODULE에 MOTOR관련 DATA 소실로 운전 불가 상태입

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# 작업 공정 사진

작업공정

AC SPINDLE MOTOR OVERHAUL



SMI MODULE 분해

물 유입으로 부식되어 전도 소손된것이 아닐까 예상 추정됨

작업공정

AC SPINDLE MOTOR OVERHAUL



SMI MODULE

Ass'y 교환 후 시운전 TEST 실시

# 시운전 TEST 실시 운전 MONITORING

STARTER - TEST - [Drive\_unit\_1 VECTOR\_03 - Configuration]

Project Control panel Edit Target system View Options Window Help

Insert single drive unit  
 Drive\_unit\_1  
 Automatic Configuration  
 Overview  
 Communication  
 Topology  
 CLS\_S\_126  
 Infeeds  
 A\_INF\_02  
 Insert DCC chart  
 Configuration  
 Expert list  
 Control logic  
 Functions  
 Communication  
 Diagnostics  
 Input/output components  
 Encoder  
 Drives  
 VECTOR\_03  
 Insert DCC chart  
 Configuration  
 Expert list  
 Functions  
 Control logic  
 Setpoint channel  
 Open-loop/closed-loop control  
 Functions  
 Messages and monitoring

Display data set  
 Drive data set: D05 0 (Active)  
 Command data set: C05 0 (Active)  
 Configure D05...  
 Add D05...  
 Remove D05...  
 Add C05...  
 Remove C05...

Configuration | Drive data sets | Command data sets | Units | Reference variables - setting | Blocked list - setting

Name: VECTOR\_03  
 Drive object no.: 3  
 Drive objects type: [1] VECTOR  
 Control type: [21] Speed control (with encoder)  
 Function extensions: Function modules / tech. packages...  
 PRDR drive telegram: [999] Free telegram configuration with BICO

VECTOR\_03 Motor Module\_3 (Power unit)  
 Component number: 3  
 Power unit type: Single motor module  
 Order no.: 6SL3120-1TE32-0AA4  
 Power unit rated current: 200.00 Arms  
 Power unit rated power: 75.00 kW  
 Current power unit operating values  
 DRIVE-CLIQ  
 Identification via LED

VECTOR\_03 Encoder\_5 (Encoder 1)  
 Component number: SWk  
 Encoder evaluation: SM121\_4  
 Type: SM120/DO  
 Order no.: 6SL3055-0AA00-5MA3  
 DRIVE-CLIQ  
 Identification via LED

Motor data  
 Motor type: [11] Induction motor (floating)  
 Order no.: 1PH7186-2D005-8B03  
 Speed: 1000.0 rpm

Enc. type: rdsay, [2001] 2048, 1 Vpp, A/B, C/D, R  
 Order no.: 1PH7186-2D005-8B03  
 Resolution: 2048  
 Encoder data set number: 0

Give up control priority  
 Enables  
 D05: [0] [v]  
 C05: [0] [v]  
 D0S: [0]

n setpoint specification  
 n = [2000] rpm  
 0% n x [123] % = 2460.00 rpm

Output frequency smoothed: 33.3 Hz  
 CO Output voltage smoothed: 321.1 Vrms  
 Motor current: 56.73 Arms  
 Torque utilization: 0.5 %

Speed: Specified 1000.0 Actual 1000.1 rpm  
 Torque: 293 4.81 Nm

[10] Operation - everything enabled  
 Enables available  
 Diagnostics  
 OFF1 enable  
 OFF2 enable  
 OFF3 enable  
 Enable operation  
 Ramp/function open enable  
 Ramp/function generator start  
 Setpoint enable

Control panel Target system output load to PG output Diagnostics overview

Control priority Drive control panel stop with spacebar Realtek USB GbE Family Controller TCP Online mode

5°C 대체도 화면

2025-12-31 02:07:21

