



AIDA GREATER ASIA

**After Lock Down
Presses Check List**

We understood that due to COVID-19 Pandemic, businesses around the world are forced to shutdown temporarily.

Considering that after a long period of shutdown, re-operating the machine under unknown conditions may cause unexpected failures, we hereby refer to the following precautions:

- 1. Carefully check the surrounding environment to ensure that the machine is in a normal and safe condition.**
- 2. Allow sufficient circulation lubrication time**
- 3. Visually inspect whether the oil and grease are hardened**
- 4. Is there any rust caused by no oil issue?**
- 5. Check the battery condition of each power supply device (battery depletion could be expected)**
- 6. To back up Important programs/data in USB in advance**
- 7. Carefully check the position of the machine body, feeder, TF device and other equipment before the action.**

A list of potential Malfunction issues and its appropriate solution is enclosed. In case you have encountered any other issues, please contact us immediately at enquiry@aida.com.sg.

AIDA is always here for you.

No.	ISSUE	SUGGESTED ACTIVITY TO AVOID / RECTIFY PROBLEM	ACTION PLAN IF PROBLEM PERSIST
1	AIR LEAKAGE FROM AIR DRIVEN CYLINDERS DUE TO HARDENING OF SEAL / O-RINGS	For automatic lubrication supply cylinders: After initial power ON, allow press machine lub. system to lubricate air cylinder seals by leaving it idle (At lubrication ON) for 30 Minutes.	In case of any abnormal air leakage, Contact AIDA service.
		For Manual lubrication supply Cylinders (Hand pump type lubrication): Do proper lubrication of cylinder seals by pumping manual pump prior of initial power ON / air supply ON.	In case of any abnormal air leakage, Contact AIDA service.
		For NC1 Model press: Pour 30-40 ML of Lubrication oil (VG 32) in the oil inlet provided at top of the Balancer cylinders prior of machine air / power ON.	In case of any abnormal air leakage, Contact AIDA service.
2	MOISTURE / RUST CONTAMINATION IN MAIN AIR SUPPLY	After turning ON the air compressors & before turning ON machine main air supply, remove main air supply hose from the inlet port and drain out the incoming air for few minutes until getting clean & dry air. Then connect back the air inlet hose and open the main the air inlet valve.	In case of Dirty / Contaminated / Too moist air, Do not connect air supply hose to the press machine inlet. Correct the air supply quality prior of air hose connection. Contaminated air supply may damage to the internal operating components of press machine.
3	DRYING OF SLIDE GIBS	For Grease Lubrication type press machines: After initial power ON, turn ON & OFF the machine control power at least 15 times after a regular interval of 30 seconds. This will make run the grease pump several times and will provide sufficient grease to the Slide Gibs . Then free run testing of press machine for 1 Hour and monitor for any rise in slide gib temperature.	In case of any temperature rise at GIB area, stop the press operation and contact AIDA service.

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4	DRYING OF BUSH AND BEARINGS	<p>For Oil Lubrication type press machines: After initial power ON, allow press machine lub. system to lubricate Bushings / Bearings sufficiently by leaving the machine idle (At lubrication ON) for 30 Minutes.</p> <p>Then free run testing of press machine for 1 Hour and monitor for any rise in Bushing / Bearings temperature.</p>	<p>In case of any temperature rise or any abnormal noise at Bushing / Bearings area, stop the press operation and contact AIDA service.</p>
		<p>For Grease Lubrication type press machines: After initial power ON, turn ON & OFF the machine control power at least 15 times after a interval of 30 seconds.</p> <p>This will make run the grease pump several times and will provide sufficient grease to the Bushing .</p> <p>Then free run testing of press machine for 1 Hour and monitor for any rise in Bushing Temperature.</p>	<p>In case of any temperature rise or any abnormal noise at Bushing / Bearings area, stop the press operation and contact AIDA service.</p>
5	DRYING OF GREASE AT ROLLERS / BEARINGS / SLIDING SURFACE/ LM GUIDE / BALL SCREW etc	<p>Prior to taking press machine into operation, make sure to do grease top up at all specified greasing points as mentioned in the instruction manual of the press machine.</p>	<p>In case of any abnormal temperature rise / abnormal noise from any area, stop the press machine operation and contact AIDA service.</p>

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6	DROPPED HOLF HYDRAULIC OIL PRESSURE	<p>After turning ON the main air supply, the HOLF should get charge up automatically.</p> <p>* In case the HOLF doesn't charge up to the specified pressure and pump doesn't stop and keeps pumping continuously, follow the procedure for Oil top up & Air bleeding as described in the instruction manual.</p>	If problem persisted, contact AIDA service.
7	LUBRICATION OIL LEVEL	<p>Prior to machine power ON, check the oil level for all oil tanks / reservoirs.</p> <p>In case of low oil level, top up the required oil amount, then power ON the machine and check if there is any oil leakage in the circuit.</p>	In case of any oil leakage or further oil level drop at oil tank, contact AIDA service.
8	STRUCKING OF FLYWHEEL BRAKES	<p>After prolonged non-operation of the press machine, the flywheel brake of the press machine flywheel may get stucked /engaged at one point.</p> <p>*Before starting main motor, ensure that flywheel brake is operating properly and is in disengaged position.</p>	<p>In case of stucked flywheel brake, disengage it manually and lubricate its plunger by applying little amount of oil.</p> <p>If problem persisted, contact AIDA service</p>

- CONDUCT OPEN CHECK ON THE CONTROL PANELS AND DO A PHYSICAL CHECK OF MACHINES AGAINST RODENTS.
- ELECTRICAL RELATED POINTS TO BE CHECKED AFTER LOCKDOWN

NO.	ISSUE	POSSIBLE FAULT OCCUR AT DISPLAY	SUGGESTED ACTIVITY TO AVOID / RECTIFY PROBLEM	ACTION PLAN IF PROBLEM PERSIST
1	PLC BATTERY FAILURE	<p>PLC Breakdown</p> <p>PLC Communication failure</p> <p>Sequencer Battery Down</p> <p>Sequencer</p> <p>PLC Normal Output</p> <p>PLC Battery Failure</p>	<p>A wrench symbol is displayed on the operator interface terminal and the message PLC BATTERY FAILURE is displayed on the DIAGNOSIS screen.</p> <p>It indicates that the (PLC) data back-up battery is almost depleted.</p> <p>OLD battery need to be replaced by new one.</p> <p>Energize the PLC control power source for at least 5 minutes before replacing the battery with a new one.</p> <p>This supplies power to the capacitor that maintains the existing data while the battery is being changed.</p>	<p>In case of PLC abnormal behaviour Or Output not getting on, Contact AIDA service.</p>
2	DISPLAY (HMI) BATTERY FAILURE	<p>Display Not Able To Power On Or Get Energized</p>	<p>The “RUN” LED located on the left side of the operator interface terminal has turned red or orange (normally green), it indicates that the Display memory backup battery has died.</p> <p>In this case, replace the battery with a new one.</p> <p>Energize the control power source for at least 5 minutes before replacing the battery with a new one.</p> <p>Then remove the used battery and load a new battery within 5 minutes after removing the used one.</p> <p>If the operator interface terminal is left without a battery for longer than 5 minutes, the data stored in the memory will be lost.</p>	<p>In case of not getting on after battery change or data lost, Contact AIDA service.</p>

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3	TSW MALFUNCTION OR FAILURE OR POWER SUPPLY FAILURE	Function Monitor Anti-repeat Timing Switch Timing Switch Brake Monitor Timing Switch Motion Monitor PC Relay Clutch & Brake Fault Timing Switch Normal Signal Function Monitor Anti-repeat Relay Function Monitor Input Timing Function Monitor Anti-repeat Relay	<p>Because of the lock down period, it is possible the power supply capacity goes week, please check:</p> <ul style="list-style-type: none"> • Power supply (both 5VDC&24VDC) of the TSW . • Double check the locking of all connectors & all relays of PSU relay card. <p>Otherwise Output signals from the proximity switch, relays and timing switch of the function monitor are faulty.</p>	<p>Higher chances of power supply failure or week memory of TWS controller for saving the encoder dats (tends to change in the crank angle)</p> <p>In this case, need to change the TSW power supply or TSW itself.</p> <p>Contact AIDA service.</p>
4	CLUTCH & BRAKE SOLENOID VALVE NOT WORKING	Clutch & Brake Sol.V.Monitor CL&BR Control Fault CL&BR Output Fault	<p>Perform the "Clutch brake solenoid valve function test" as per of the procedure mention in the manual book .</p>	<p>If problem persisted, contact AIDA service.</p>
5	INVERTER OR MAIN MOTOR STARTUP PROBLEM	Inverter Main Motor Thermal Trip	<p>It is possible the capacitor (regenerative system) of the inverter or drive unit may get discharge completely .</p> <p>After initial power On and after confirming the lubrication & other mechanical check up, turn on the main motor at lowest SPM for about min 15 minutes.</p> <p>Then at full SPM for another 10 minutes.</p> <p>To confirm the flywheel brake is working OK.</p>	<p>If problem persisted, Contact AIDA service.</p>

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6	U.P.S. ALARM (CHECK THE UPS IN THE CONTROL ENCLOSURE)	UPS Battery Fault	U.P.S. fault signal may be detected.	If the error cannot be reset, change the battery with a new one or re-charge it. Or replace the UPS unit with a new one referring to the Instruction Manual for the UPS.
		Converter Under Voltage Has Been Detected	Because of the Drop in the UPS output voltage or may be reduction in battery power.	
		Magnetic Fuse Blown Out	After Initial power on, keep the machine in idle condition for about 30 minutes. Check the LED on the front panel of the UPS and reset the error.	
7	TRANSFER / DESTACK FEEDER: FAILURE (VOLTAGE DROPS) OF SERVO DRIVES / MP2200 PLC / DISPLAY / DC BATTERIES OR POWER SUPPLY.	Servo Motor Encoder Battery Alarm	After prolonged non operation of the press machine, it's highly possible the battery voltage goes down.	If battery to be replaced, encoder values may be disturbed. Reattaching or home position setting required. In this case, Contact AIDA service.
		MP2200 Controller Battery Alarm	After initial the control power ON, don't operate the machine immediately Keep machine idle for min. 30 minutes.	
		PLC Battery Voltage Has Dropped (Fault)	Check the voltages of the battery after 30 minutes with an multimeter, only start the operation if up to their ratings. Otherwise need to change the battery with new one .	
8	TRANSFER FEEDER : SYNCHRONIZATION LAG	Bring The Feed Bars On The Locus	Possible the feedbars values got disturbed after prolonged non-operation of the press machine. Required physical measurement & confirmation of the feedbars with the values displayed on the TSS/TCS display.	If problem persisted, the recalibration of the feedbars required. Contact AIDA service immediately.
		Bring The Feed Bars To The Outside Of Press Slide Interference		
		Bring The Feed Bars At The Take Out Position	If any variation found, correction required before running the machine in production.	

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9	MPC MALFUNCTION OR FAILURE	Initial / E-stop Button Release	Inconsistency has been detected in the press controller's internal dual processing.	<p>If the problem persisted, need to change the MPC unit.</p> <p>Contact AIDA service.</p>
		CPU 5VDC Fault	Activation of the controller has not been confirmed.	
		CPU 24VDC Failure		
		MPC Controller Normal Output	Check the communication cable connection, or check the controller power supply.	
		Encoder Converter Breakdown	Check the BDC angle of the machine.	
		MPC-PLC Communication Failure	If OK, check all the emergency switches of the machines.	
		MPC CPU Stop	If still the problem persisted, take off the machine main power & takeout all the MPC connectors.	
		MPC Dual CPU Comparison	Insert back again, turn ON the machine power.	

