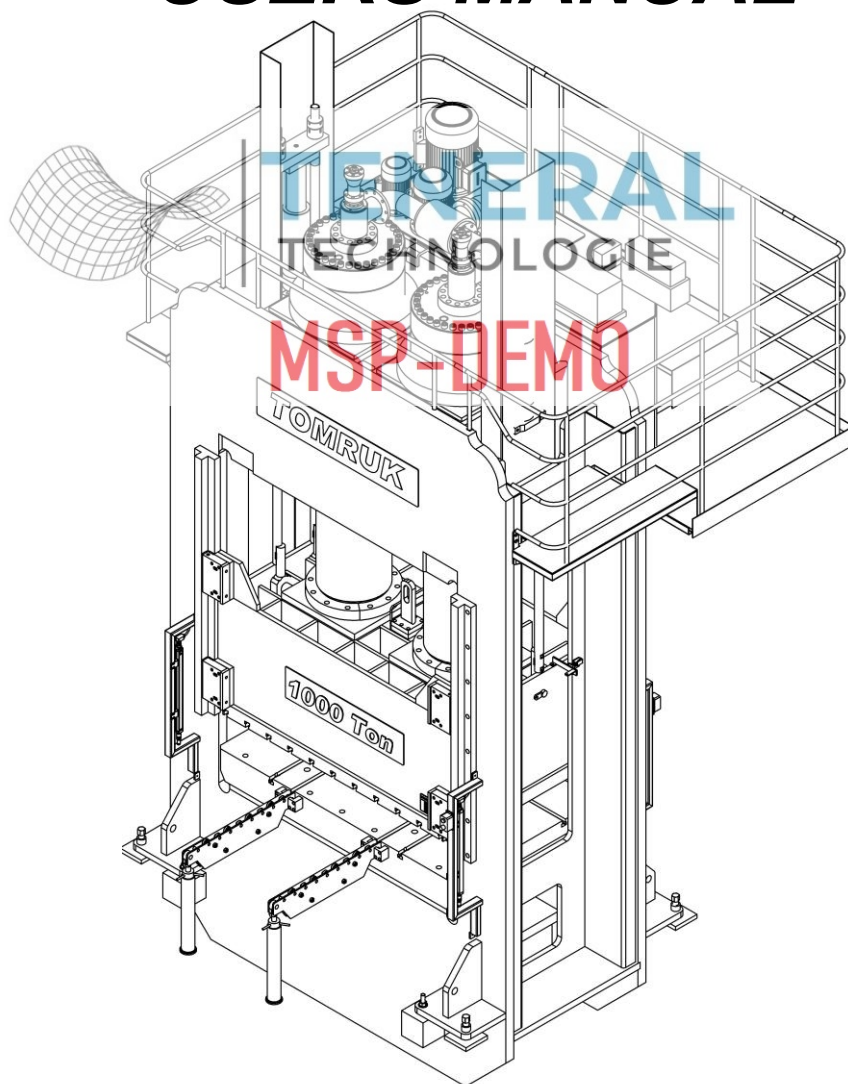


**TOMRUK
1000 TONS
HYDRAULIC PRESS
Nr: 012345**

USERS MANUAL



Demo Manual

TOMRUK PRES

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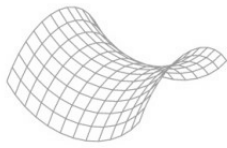
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6 GENERAL CONTROLS, MAINTENANCE and REPAIR

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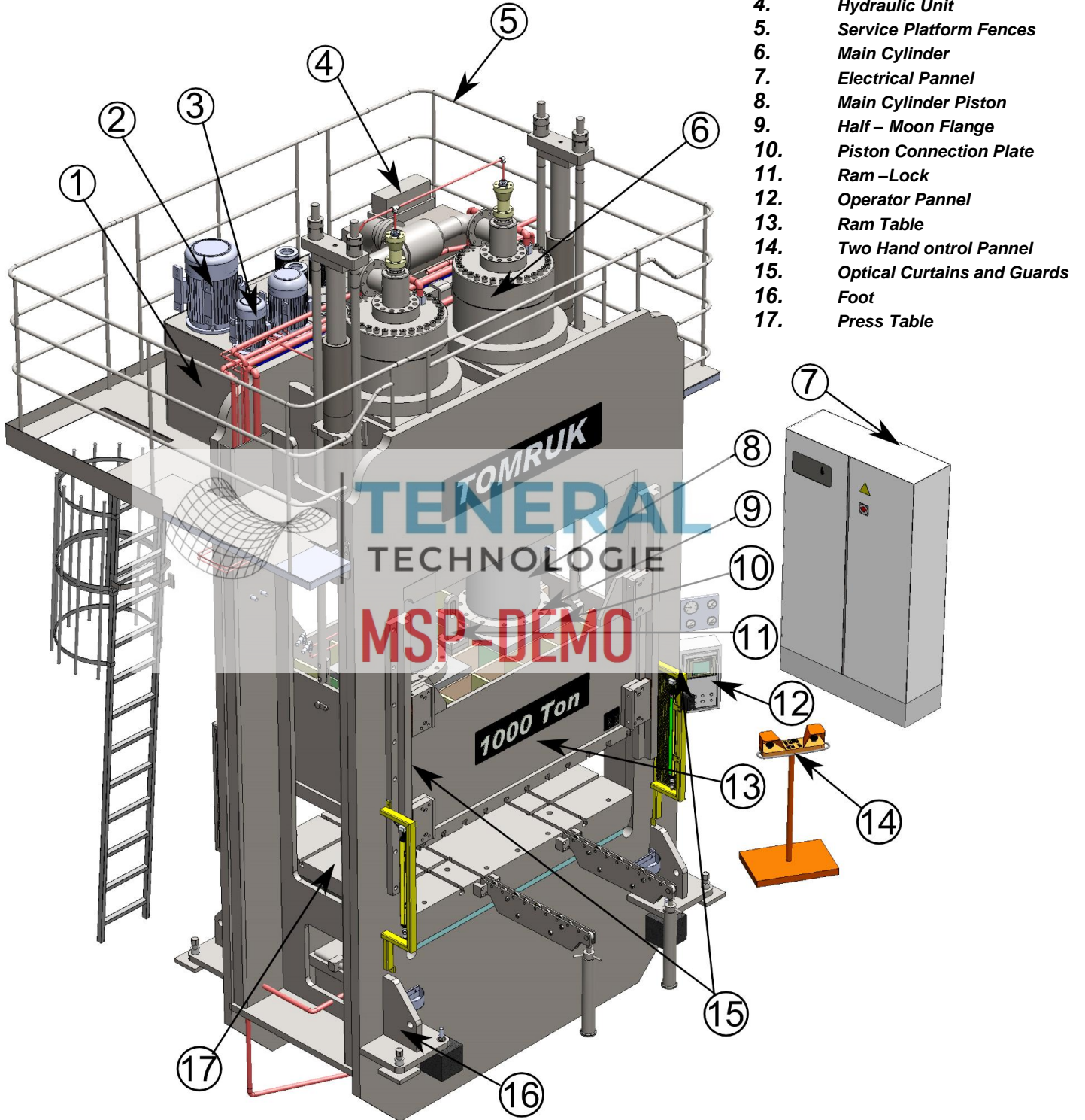


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GENERAL VIEW



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CAUTION



Please read this manual thoroughly, before activating the machine.

1 SAFETY INSTRUCTIONS and PRECAUTIONS

This manual contains information about shipment, operating, maintenance and repair process of the hydraulic press.

Please read this manual carefully, before activating the press.

For safe and productive use of the press, follow the instructions sequentially in this manual.

1.1 Test-Run Before Shipment

All Tomruk presses are being shipped after test-runs. So be sure not to change any connections in hydraulic or the electric circuit while commissioning the press.

1.2 Protection Of The Users Manual

This manual should be preserved with the press during its entire operation life. In case of loss, order a new manual. If the press is sold to a 3rd company, please deliver the manual to buyer company and inform us about the buyer company's name and adress.

1.3 Safety Components

- Optical Guards on Front Face
- Fixed Guards on both Lateral Sides
- Ram Lock at upper-end of the press stroke
- Emergency Button
- Pressure Safety Valves
- Safety Relays

Bridging electrical components or removing any of the components above, endangers both the operator and the press safety. If there is a need for removing or modifying of a safety component for a desired operation mode, please consult with Tomruk engineers. In this way, your modification needs can be realized in line with press safety rules.

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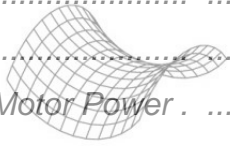
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PRESS TECHNICAL SPEC.

Model..... TP1000
Production Date..... 2013
Press Power.....
Press Stroke.....
Blank Holder Stroke .
Table
Press Daylight Max.....
..... Min.....
Column Daylight.....
Working Pressure.....
Motor 1 Power.....
Motor 2 Power.....
Pump 1.....
Pump 2.....
Cooler Motor Power .
Electricals..... Supply.....
..... Control.....
..... Valve.....
PLC
Oil Volume..... (Hydraulic Oil #46).....
Table
Fast Approach Speed.....
Pressing Speed.....
Return Speed.....

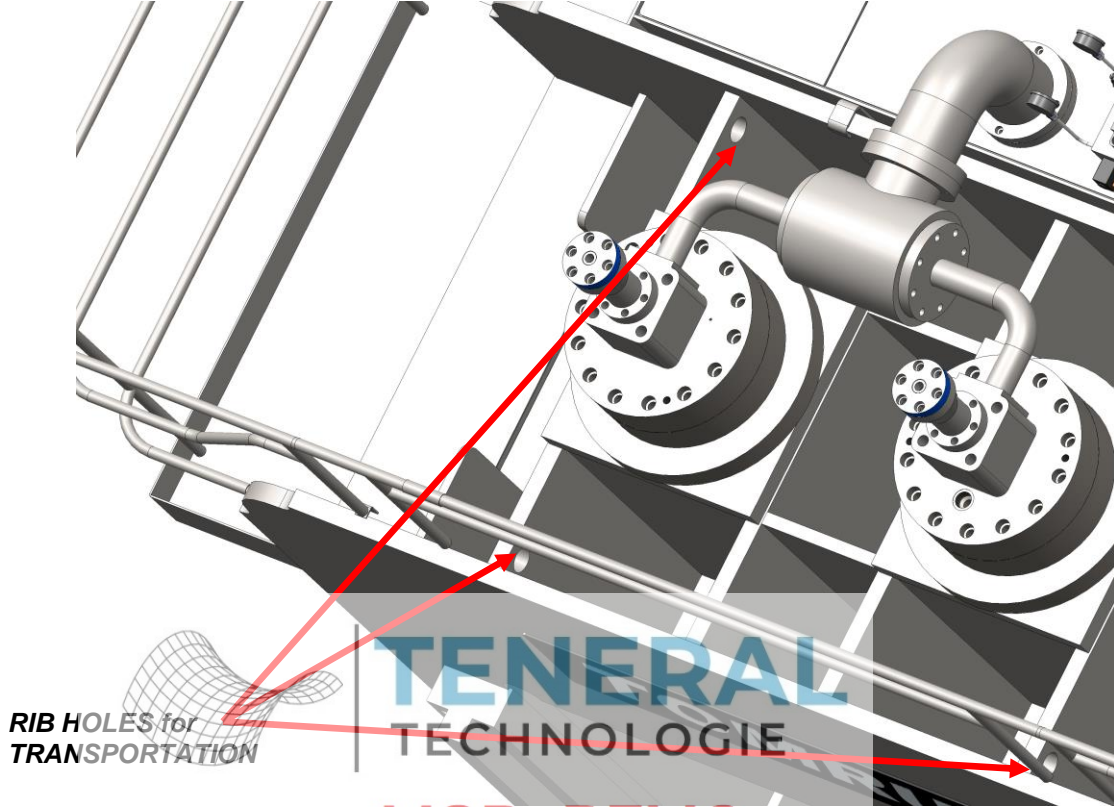


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2 SHIPMENT PROCESS

2.1 Preparing for Transportation



HOLES for TRANSPORTATION

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1) Disassembly of the press is explained in **Chapter 3.3**. To transport the press safely after disassembly, follow the instructions below and drawing1 and drawing2 in previous page. The press is disassembled as explained in chapter 3.3. The basement bolts are unscrewed. The press is lifted up by a crane. The crane's hooks are tied to upper ribs holes shown in the picture above. The press is tilted by two cranes, so that it lies horizontally in the face down or side down. Finally, the carrier drives under the press. Front and back optic guard

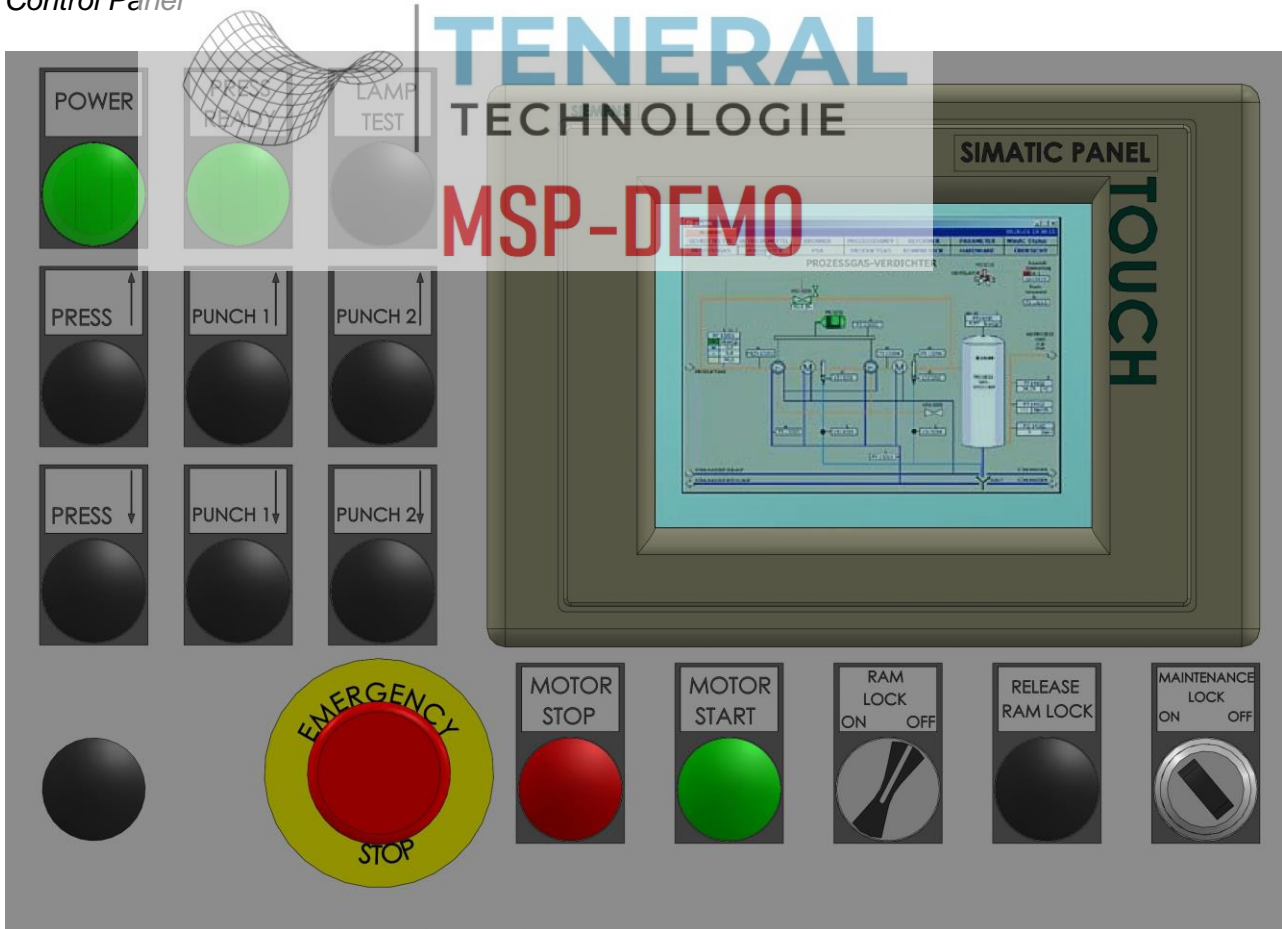
- Lamp test module
- Two alternative return modes of the press; by pressure or by switch.

2.1.1 Running The Press

If the automatic cycle does not start and signal on the control panel is flashing, this means the press is not at its starting origin point.

Press back button on the control panel should be pressed to raise the press to its starting position. In automatic mode the press back button has a secondary operational stop function besides driving the press to its origin point. If this button is pressed while the press is running, the press stops. If it is pressed while the press is on hold, the press raises to its starting origin point.

Control Panel



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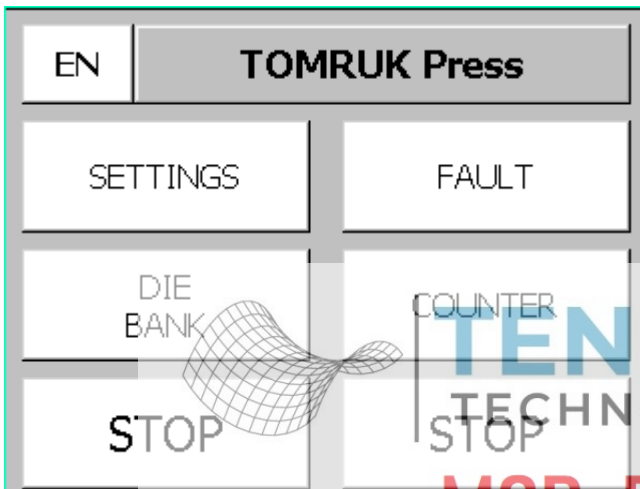
SIGNALS

MAIN SWITCH : The main board has power
OPTIC GUARD : Optic guard in front and back is interrupted.

Continuously : A cycle can be started in automatic mode.

Operator Panel

2.1.1.1 HOME PAGE

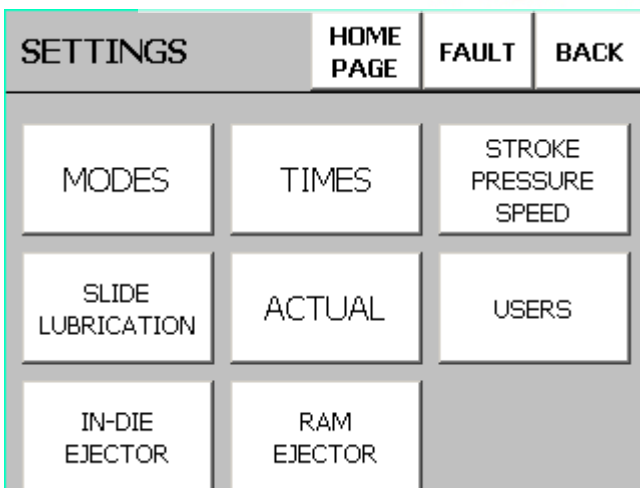


It is the first displayed page when the operator turns on the main switch.

All of these different buttons are selectable.

If the press is de-energized and to be energized again, press needs to be referenced. In this case, referencing buttons is appeared in a free field below the page and the "FAULT" tab is flashing.

2.1.1.2 SETTINGS



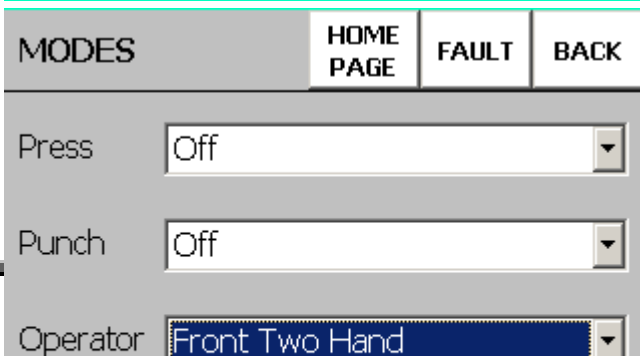
This page has all the links to adjustment pages of the press.

2.1.1.2.1 MODES

Press Modes :

- Off

2.1.1.2.1.1 LOCKED PUNCH




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LEFT PUNCH	HOME PAGE	FAULT	BACK
	STROKE (mm)	SPEED (%)	RAM PRESS. (bar)
Actual	0000.0		000
Level 3	0000.0	000	000
Level 2	0000.0	000	000
Level 1	0000.0	000	000

Locked punch stroke, speed and ram pressure values are adjusted for 3 levels.

If you would like to turn Level 2 and 3 off, you should click their buttons.

2.1.1.2.1.2 SLIDE LUBRICATION

SLIDE LUBRICATION	HOME PAGE	FAULT	BACK
 Lubricating Period 0 hour			
<input type="button" value="MANUAL SLIDE LUBRICATION"/>			

Slide lubrication period during the press's working time is adjusted and if you need, manual slide lubrication can be triggered.

2.1.1.2.1.3 ACTUAL

ACTUAL	HOME PAGE	FAULT	BACK
Press Stroke		0.0	mm
Left Punch Stroke		0.0	mm
Right Punch Stroke		0.0	mm
RAM Pressure		0	bar
P1 Pressure		0	bar
P2 Pressure		0	bar

This page is displayed real pressure and

Log on

User:

Password:

Administrator password is required for entering the bank page.

All parameters related to the die is saved in the memory and if required, it can be recalled.

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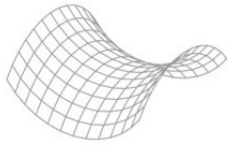
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2.1.1.3 COUNTER

COUNTER	HOME PAGE	FAULT	BACK
0			
<input type="button" value="rst"/>			
Total N.of Strokes For Die	<input type="text" value="0"/>	<input type="button" value="rst"/>	
Total N.of Strokes	<input type="text" value="0"/>		

In this page, number of pressed parts on that shift and total number of pressed parts of press for all dies are displayed.



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Hydraulic Component List

POS. NO	COMPONENT NAME	BRAND	CODE / TYPE	QTY
1	PRESSURE GROUP 1			
1,01	LOGIC VALVE	TOMRUK		3
1,02	LOGIC VALVE COVER NG-25			3
1,03	PRESSURE RELIEF VALVE			3
1,04	DIRECTIONAL CONTROL VALVE			3
1,05	CHECK VALVE			1
1,06	LOGIC VAVLE			2
1,07	LOGIC VAVLE COVER NG-25			2
1,08	DIRECTIONAL CONTROL VALVE			2
1,09	DIRECTIONAL CONTROL VALVE			2
1,10	LOGIC VAVLE COVER NG-25			2
1,11	HYDRAULIC BLOCK			1
2				
2,01	PRE-FILL VALVE			1
2,02	MAIN CYLINDER			2
2,03	ELEVATOR CYLINDER			2
2,04	RAM EJECTOR CYLINDER			2
2,05	RAM LOCK CYLINDER			1
2,06	BLANKHOLDER CYLINDER			2
2,07	MOTOR - M4			1
2,07A	COUPLING - K4			1
2,08	PUMP - P4			1
2,10	OIL FILTER			1
2,11	CHECK VALVE WITH SPRING			1
2,12	COOLER			1
2,13	AIR FILTER			3
2,14	LEVEL INDICATION			1
2,15	MAGNET			1
2,16	DISCHARGE VALVE			2
2,17	PUMP - P1			1
2,18	MOTOR - M1			1
2,18A	COUPLING - K1			1
2,19	CHECK VALVE			4
2,20	PUMP - P2			1
2,21	MOTOR - M2			1
2,21A	COUPLING - K2			1
2,22	PUMP - P3			1
2,23	MOTOR - M3			1
2,23A	COUPLING - K3			1

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2,24	SPEED ADJUSTMENT VALVE			4
2,25	GLOBE VALVE 3/8"			1
2,26	PRESSURE TRANSMITTER			4
3				
3,01	PROPORTIONAL PRESSURE RELIEF VALVE			1
3,02	ELECTRONIC CARD			1
3,03	DIRECTIONAL CONTROL VALVE			2
3,04	DIRECTIONAL CONTROL VALVE			1
3,05	DIRECTIONAL CONTROL VALVE			1
3,06	LOCK VALVE			2
3,07	PRESSURE REDUCER VALVE			1
3,08	CHECK VALVE			2
3,09	CHECK VALVE			1
3,10	DIRECTIONAL CONTROL VALVE			1
3,11	HYDRAULIC BLOCK			1
4				
4,01	CHECK VALVE			1
4,02	PRESSURE RELIEF VALVE			1
4,03	POPPET VALVE			1
4,04	MANOMETER			1
4,06	CHECK VALVE WITH SPRING			1
4,07	OIL FILTER			1
4,08	HYDRAULIC BATTERY			1
4,09	HYDRAULIC BLOCK			1
5				
5,01	DIRECTIONAL CONTROL VALVE			1
5,02	LOGIC VAVLE			1
5,03	LOGIC VAVLE COVER			1
5,04	PRESSURE RELIEF VALVE			1
5,05	PRESSURE RELIEF VALVE			1
5,06	ORIFICE			1
5,07	POPPET VALVE			1
5,07A	SOLENOID			1
5,08	LOGIC VAVLE			1
5,09	LOGIC VAVLE COVER			1
5,10	ORIFICE			1
5,11	POPPET VALVE			1
5,11A	SOLENOID			1
5,12	LOGIC VAVLE			1
5,13	LOGIC VAVLE COVER			1
5,14	PRESSURE RELIEF VALVE			1

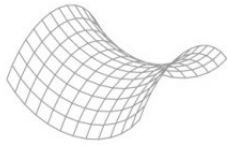
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5,15	POPPET VALVE			1
5,15A	SOLENOID			1
5,16	SETSCREW			1
5,17	HYDRAULIC BLOCK			1
6				
6,01	DIRECTIONAL CONTROL VALVE			2
6,02	PRESSURE RELIEF VALVE			4
6,03	CHECK VALVE			4
6,05	CHECK VALVE			2
6,06	HYDRAULIC BLOCK			1



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3 SPARE PARTS LIST

Part	Brand	Model / Serial
Hydraulic Oil	-	Cst 46
Oil Filter		F520-25
Air Filter	TOMRUK	LNN

SEALS		
Part	Dimensions	Number
Press Cylinder Ø 500 Part List		
PTFE Band		
Omegat Seal		
Nutring		
Wiper		
Active Punch Cylinder Ø 290 Part List		
PTFE Band		
Omegat Seal		
Nutring		
Wiper		
Active Punch Rod Ø 310 Part List		
PTFE Band		
Omegat Seal		
Nutring		

Oil Filter

: Always a micron filter must be used. If the dirty sensor is on red area oil cartridge must be changed.

If the oil cartridge is blown torn out.

- Take the press to its upper most position.
- Empty the oil tank while filtering it.
- Clean the hydraulic tank with a featherless cloth using fuel oil
- Fix the new filter cartridge and filter the tank with oil using the filter on.
- If the press motor does not run when the start button is pressed the phase line up should be check. FSR relay on the electric board has a led showing status. If this led is not lightning the phase line up should be changed.
- If the press starts running but start button is the press but stop immediately when the button is released, the ram table must be touching one of the safety limit switches. All switched must be realigned suitable levels. Then the press should be switched on to manual operation mode. In this mode the press ram must be moved to an appropriate position using instructions in the electric manual.
- The Emergency Stop Button must be controlled and checked its position either on or off.

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3.1 APPENDIX

3.2 Training Form

Tomruk Personnel in charge for Training

Elec. Eng.

Hyd. Tech.

TRAINING SUBJECTS	TRAINER	OK (✓)
<i>Operating of Control Panel</i>		
<i>Press Settings on Operator Touch Panel (if press has o.p.)</i>		
<i>General Operation of Hydraulic System</i>		
<i>Important Points about Die Changing</i>		
<i>Statement about Maintenance Procedure</i>		
	(Extra)	
	(Extra)	

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3.3 Press Service Report

Company	City	Telephone	Press Model	Press No	Manufacturing Date
Adress :				Date :	
Reporter /Authorized Person :				Completion Date :	
Reported Problem :					
Diagnose :					
Work Done :					
					
Materials Used :					
Result :					

TOMRUK Pres A.S.

Company :

Authorized Person :

Signature:

Signature

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