

Prepared by:-	Mark Dalley	Approved by:-	Martin Davies	Date:23/06/15
REV NO:-	001			
ECO:-	4525			

1. SCOPE

Hi-Force TPA series compressed air driven pumps are designed to operate high pressure hydraulic double acting torque wrenches with an operating pressure of 700Bar (10,000 psi).

These instructions cover the following models:

TPA07D - 7 bar (maximum) air supply.

Refer to name plate on the pump for identification.

2. SAFETY

READ ALL OF THIS MANUAL BEFORE OPERATING THE PUMP

**FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT
IN SERIOUS BODILY INJURY**

- Ensure that all equipment connected to the pump is in good condition and is all rated for 700 bar operating pressure.
- Always stand the pump on a stable level surface during operation.
- Never invert the pump or lay it on its side either in use, transport or in storage.
- Inspect hoses regularly for damage and wear. Do not use hoses that are frayed, kinked, abraded or leaking.
- Never move the pump or torque wrench by pulling the hoses.
- Do not work with hoses sharply bent or kinked.
- Do not handle hoses that are pressurised. Oil escaping under pressure can penetrate the skin causing serious injury. **DANGER:** If oil is injected under the skin see a doctor immediately.
- Never operate the pump unless both of the hydraulic hoses and the TWS/TWH are connect to the pump.
- Always use eye, ear and hand protective equipment when using this pump and associated equipment.
- Disconnect the pump from the air source when carrying out maintenance or adjustments (except pressure relief valve adjustments).

3. SPECIFICATIONS

The pump is a three speed pump with the following pressure and flow ranges

Pressure range (bar)	Flow (l/min)
0-65	7.0
65-325	1.6
325-700	0.8

Weight	30 kg (including oil)
Useable oil capacity	7 litres
Max sound pressure level	90 dB(A)
Maximum oil temperature	80 ° C

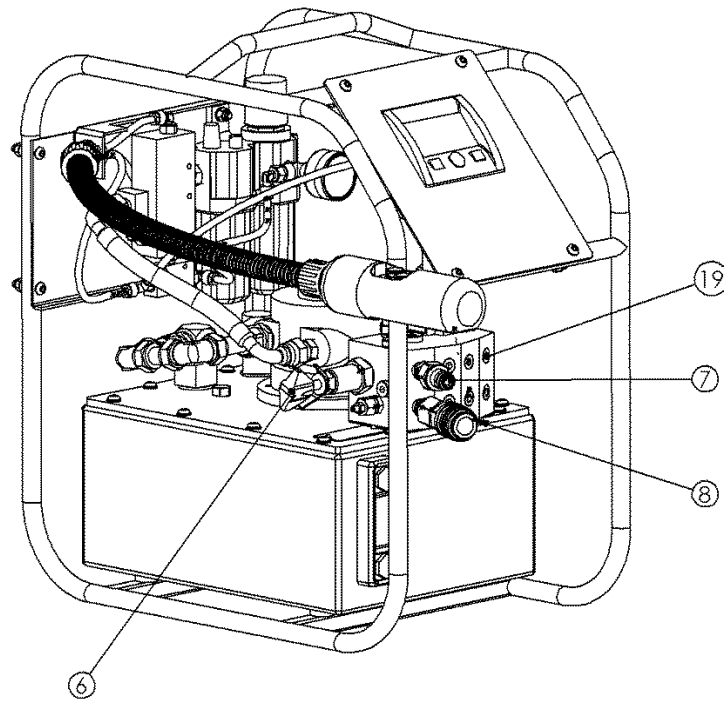
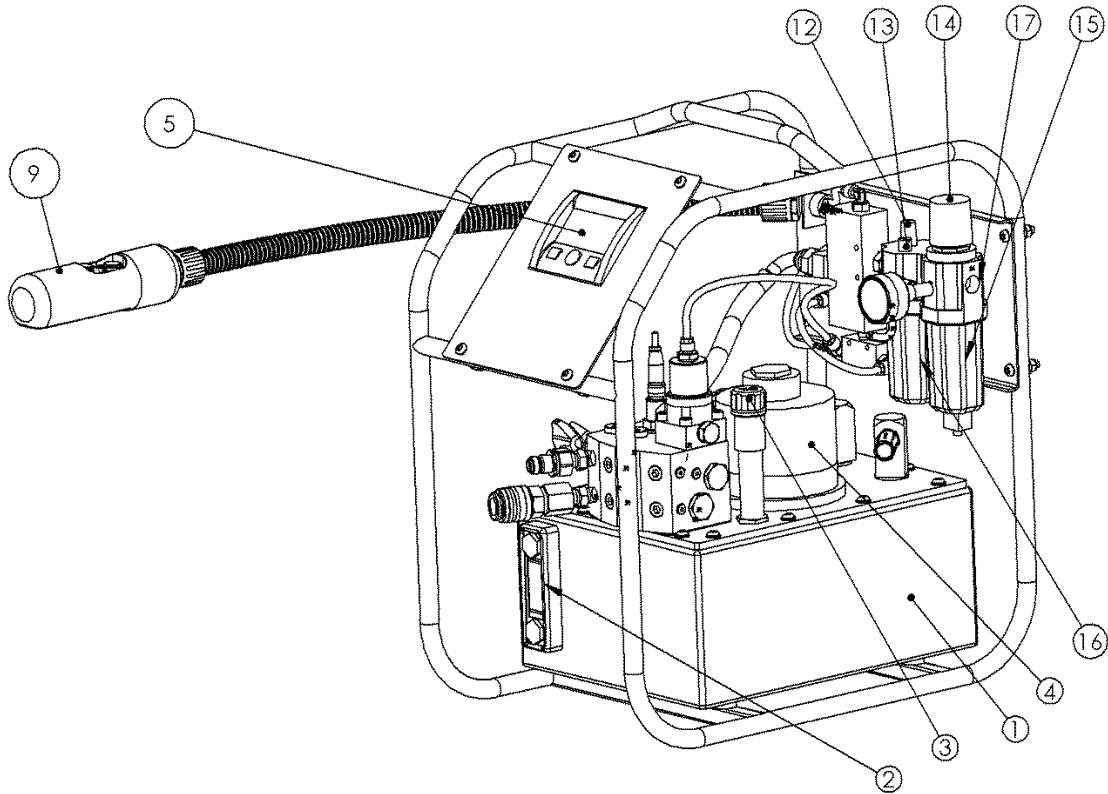
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4. IDENTIFICATION OF COMPONENTS

Refer to diagrams on page 3.

1. Oil reservoir
2. Oil temperature/ level gauge
3. Oil filler/ breather cap
4. Motor
5. Oil pressure gauge
6. Adjustable pressure relief valve with locking wing nut.
7. Tool advance coupler (700Bar maximum)
8. Tool retract coupler (90Bar maximum)
9. Control pendant.
10. On/advance button.
11. Stop button
12. Air lubricant control
13. Air lubricant filler plug.
14. Air pressure regulator
15. Water trap
16. Air lubricant reservoir.
17. Air inlet.
18. Air pressure gauge.
19. Additional tool ports fitted with blanking plugs

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Hi-Force HYDRAULIC TOOLS		OPERATING INSTRUCTIONS FOR TPA SERIES AIR DRIVEN TORQUE PUMPS (DIGITAL GAUGE)		TDS:- 1421
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5. PREPARATION OF THE PUMP

Immediately after unpacking, examine the pump for signs of transit damage and if found contact the shipping company.

Depending on the shipping method used, the pump may or may not be supplied already filled with oil. Check the oil level using the Temperature/level gauge (2). During transit the Oil filler/breather cap (3) will have been replaced with a black transit plug. This plug must be removed and the orange filler breather (packed separately) fitted. If the pump needs filling with oil proceed as below.

FILLING PUMP WITH OIL

Stand the pump on a level surface and fill the tank with Hi-force HFO46 oil via the filler breather cap (3) until the oil level is at, or up to approximately 10mm above the upper marker as shown on the level gauge.

The pump is self-priming, so is now ready for use.

FILL AIR SUPPLY LUBRICANT RESERVOIR.

Remove air lubricant filler plug (13) and fill air lubricant reservoir (16) with ISO VG 10 air line oil.

CONNECT AIR SUPPLY

Check that the air supply is via a minimum hose size of ½" (13mm) bore, that the available pressure is at least 5.5 bar (80psi) and preferably 7 bar (100psi) and that the compressor can supply a minimum flow of 50 cfm (25 l/sec). The pump will run satisfactorily below these figures but output flow rate will be affected.

Install a suitable connector for the hose system in use into the air inlet (17). The thread on the inlet is 3/8" BSP.

6. CONNECTION OF TORQUE WRENCH TO PUMP

Connect the torque wrench to the pump using Hi-Force type HTWH hoses. All Hi-Force torque equipment is fitted with flat face quick release couplers. Ensure both halves of the couplers are clean before connecting. To connect, simply push the male and female halves together. To disconnect, turn the knurled collar in the direction of the arrow and then slide the collar back in the direction of the second arrow. Do not attempt to connect or disconnect while under pressure.

Connect the female coupler on the red hose to the male advance coupler (7). Connect the male end of the black hose to the female tool retract coupler (8). Connect the other ends of the hoses to the torque wrench. N.B. If using torque wrenches other than Hi-Force or wrenches and hoses that have been modified, check that the wrench is connected correctly so that the male high pressure pump coupler (7) is connected to the advance port on the tool. Failure to do this may result in leakage, tool damage or personal injury.

Caution: Refer also to torque wrench operating instructions for detailed information on the correct operation of these tools.

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7. OPERATION

CONTROL PENDANT BUTTON FUNCTIONS

The control pendant (9) has two buttons which perform all functions of the torque pump.

The advance button (10) is a dual function button. Pressing and releasing the button once will start the pump and set the pump to the torque wrench retract mode. Pressing the button a second time makes the torque wrench advance. The pump will continue in this mode until the button is released. The torque wrench will then automatically retract

The stop button (11) stops the pump motor.

TURN ON AIR SUPPLY.

CAUTION: When the air supply is first turned on after the pump has been in transit or storage, it is possible that the pump may start unexpectedly. If this happens press the stop button (11) on the control pendant, to stop the motor until ready to proceed.

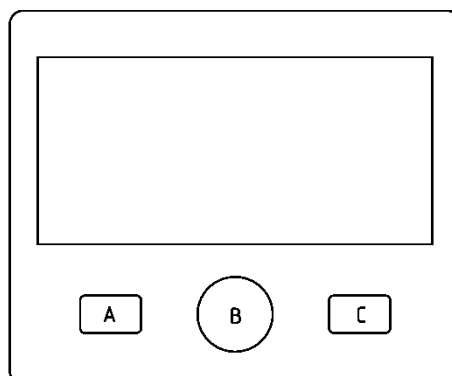
Adjust the air pressure using the air pressure regulator knob (14) as high as the air supply will allow, up to a maximum of 7 bar. Check pressure on air pressure gauge (18) Note; the knob (14) must be pulled upwards to unlock it before it can be turned. Once adjusted it should be pushed down to lock.

7.1. USE OF THE DIGITAL GAUGE

The digital display includes pressure/torque conversion charts for the range of standard Hi-Force tools and for up to five custom conversion charts which can be set by the end user using just the maximum operating pressure and the maximum torque at maximum pressure.

7.1.1. SYSTEM OPERATION

The unit has 3 buttons, referred to as A, B and C as labelled bellow:



7.1.1.1. MAIN SCREEN

The default screen displayed at power-up displays the pressure or torque for the selected tool.

- Button A switches the display to Metric mode (Bar/Nm)
- Button B enters the configuration menu. For tool selection and review of pressure/torque conversion charts

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- Button C switches the display to imperial mode (psi/lb.ft)

7.1.1.2. CONFIGURATION MENU

There are various configuration options available for configuring the gauge

- Button A scrolls left through the menu
- Button B selects the displayed menu option
- Button C scrolls right through the menu

7.1.1.3. CHOOSE TOOL MODEL MENU

There are a number of standard tool models pre-programmed into the gauge. This menu allows you to select one of them. If the pressure tool is selected, the gauge displays pressure rather than torque. All of the tools can be switched between metric and imperial mode for the main menu.

- Button A scrolls left through the menu
- Button B selects the displayed tool
- Button C scrolls right through the menu

7.1.1.4. CONFIGURE CUSTOM TOOL (1-5) MENU

The gauge can store conversion charts for up to 5 custom tools. These tools can be configured in either metric or imperial units. However they are configured, they can be switched between metric and imperial display from the main menu.

- Button A allows you to set the tool conversion factor in Nm at 700 bar
- Button B exits this menu
- Button C allows you to set the tool conversion factor in lbf.ft at 10,000 psi

7.1.1.5. CONFIGURE CUSTOM TOOL IN Nm

The gauge needs to know how many Nm of torque the tool produces at 700 bar input pressure.

- Button A decreases the torque value. You can press and hold the button to change the value rapidly
- Button B saves the setting and exits the menu
- Button C increases the torque value. You can press and hold the button to change the value rapidly

7.1.1.6. CONFIGURE CUSTOM TOOL IN lbf.ft

The gauge needs to know how many lbf.ft of torque the tool produces at 10,000 psi input pressure.

- Button A decreases the torque value. You can press and hold the button to change the value rapidly
- Button B saves the setting and exits the menu
- Button C increases the torque value. You can press and hold the button to change the value rapidly

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7.1.1.7. BATTERY REPLACEMENT

The gauge requires 6 alkaline AA batteries to operate. To replace batteries when the low battery indicator shows on the screen: Remove the lower two wing nuts on the back of the unit and remove the stainless steel cover. The battery tray will then slide out of the unit. Replace all the batteries together observing correct polarity. Replace battery tray, cover and wing nuts.

7.1.1.8. GAUGE SPECIFICATIONS

Supply Voltage	8 to 32V dc
Supply Current	30 to 90 mA
Operating Temperature Range	-20 to +40 ^o C
Basic Accuracy	0.5% f.s.
Thermal Drift	1% f.s. across operating temperature range
Long Term Drift	0.2% f.s. per year
Transducer Proof Pressure	1400 bar
Transducer Burst Pressure	2800 bar
Transducer Signal Range	0.5 to 4.5V
IP Rating	IP65 (Fully protected against dust and low pressure water jets)

AIR REMOVAL FROM HOSES.

Hi-Force hoses are supplied pre-filled with oil, but never assume that there are no air pockets in a hose. Air will make the operation of a torque wrench erratic. Due to the superior quick connect couplings on Hi-Force torque wrenches, very little air is admitted to the system when connecting and disconnecting hoses but for best performance always carry out the following operation, when interchanging hoses or torque wrenches.

Turn on air supply.

Press and release the advance button (10) on the pendant (9) and the pump will start.

Warning: The torque wrench connected to the pump will usually retract at this stage. Keep fingers clear. If the tool advances then it is incorrectly connected. This must be investigated and corrected before proceeding.

Check the oil pressure gauge reading (5). This should be in the range 80-90 bar. If it is not, slacken the locking wing nut on the pressure relief valve (6) and turn the knob clockwise until the gauge registers 80-90 bar. N.B it will not be possible to increase the pressure significantly above this value. This is the torque wrench maximum retract pressure and is limited by a separate pressure relief valve. The torque wrench should now be fully retracted.

Press and hold the advance button on the control pendant. The torque wrench should advance until it reaches the end of its stroke and then the pressure will start to build up. **Caution**, if the

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tool does not advance and pressure is building up on the pressure gauge (5), the hoses may not be fully connected or the tool may be faulty.

Release the advance button and the tool will retract, when the tool is fully retracted pressure will register 80-90 bar once more.

Repeat this advance and retract cycle a few times to purge air from the hoses and tool.

Press stop button (11) to stop the pump.

NB if long hoses are employed (greater than 5 m) then this method will not be totally effective at removing air. Refer to section on pre-filling long hoses.

SETTING THE TORQUE WRENCH PRESSURE

Refer to torque wrench operating instructions for the pressure setting to achieve the desired torque value. This pressure will vary depending on which torque wrench is being used.

Caution: Carry out this pressure adjustment before fitting the wrench onto a bolt or nut.

Press and release advance button (10) to start pump.

Press and hold the advance button again and allow the torque wrench to fully advance. Keeping the button held down adjust the pressure relief valve (6) by turning the knob clockwise to increase pressure and anticlockwise to reduce pressure. Verify the pressure setting several times by releasing the start/advance button and re-pressing. The pressure setting can be locked at the desired value by tightening the wing nut under the adjusting knob clockwise. Do not use tools for this.

To stop the pump, press the stop button (11) on the pendant.

The pump is now ready for use.

METHOD OF USE.

Refer also to torque wrench operating instructions and bolt torque data.

WARNING: It is strongly recommended that operation of the pump and torque wrench is carried out by a single person. This will reduce the possibility of finger trapping accidents due to the wrench being operated while it is still being positioned on the nut or bolt. Where this is not possible due to the relative positions of the pump and the wrench then a clear system of communication needs to be established between users.

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8. ADDITIONAL OPERATION HINTS.

OIL TEMPERATURE CONTROL

The pump is fitted with a heat exchanger in the oil reservoir. Exhaust air from the air motor (4) is fed via a cooling loop in the oil reservoir.

AIR LUBRICANT

Adjust the air lubricant control (12) such that one drop of oil is being added to the air approximately every minute. The lubricant drops can be seen through the lubricant control knob. Allowing more oil into the motor than this can cause contamination of the exhaust flow.

DISCONNECTION OF HOSES.

Always stop the pump by pressing the stop button (11) before connection or disconnection of hoses. Attempting to disconnect hoses while the pump is running is difficult and can cause leakage or injury.

CONNECTION OF ADDITIONAL TORQUE WRENCHES

The pump has the facility to drive up to 4 torque wrenches simultaneously. These will all operate at the same pressure. This feature can be useful for even tightening of large joints. However it must be borne in mind that multiple torque wrenches will operate more slowly than a single wrench, so it is not necessarily a time saving method. To use this feature, switch off the pump and disconnect from the air supply. Remove blanking plugs (19) and fit the desired number of extra pairs of couplers. It is important to fit the male coupler to the top port and the female coupler to the bottom port to ensure correct torque wrench connection. Thread size in the ports is 1/4" NPT. Suitable thread sealant or PTFE tape must be used on the thread. Hi-Force can supply torque coupler sets as follows:

TP-CS1 : torque coupler set to convert TPE pump from one outlet to two outlets

TP-CS2 : torque coupler set to convert TPE pump from one outlet to three outlets

TP-CS3 : torque coupler set to convert TPE pump from one outlet to four outlets

9. MAINTENANCE

The oil level in the reservoir should not be allowed to fall below the lower marker on the level indicator (2) during use.(check oil level with torque wrench in advance position.) Keep the reservoir topped up with Hi-Force HFO46 oil. If the oil level does fall below the minimum level then air will be drawn into the pump causing erratic operation and possible damage.

Oil should be replaced after approximately 500 working hours, or more frequently in dusty conditions. To replace the oil, disconnect from air supply, remove the filler breather cap (3) and tip used oil out of tank. Dispose of oil in a responsible manner. Refill with Hi-Force HFO46 oil.

Air lubricating oil should be topped up as required via the air lubricant filler plug (13). Use ISO viscosity grade 10 oil for this purpose. Do not use hydraulic oil.

Pressure gauge should be calibrated at least every 12 months.

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10. TROUBLE SHOOTING

These pumps should be repaired only by authorised Hi-Force repair centres. The following table gives possible causes and remedies for common problems.

PROBLEM	POSSIBLE CAUSE
Tool advances with no pendant buttons pressed.	Tool incorrectly connected. Swap hose connections at tool.
Tool will only reach 80-90 Bar in advance mode, but higher in retract mode.	Tool incorrectly connected. Swap hose connections at tool.
Motor stalls before 700Bar is reached.	Low air pressure..
Motor will not start	Low air pressure or restricted air flow.
Pump will not build up or maintain pressure.	Leakage from pump or valve components – have the pump inspected by a Hi-Force repair centre
Slow torque wrench operation	Leaking seals in torque wrench. Worn piston block elements, leaking relief valve, leaking unloading valve, worn directional valve – have the pump inspected by a Hi-Force repair centre.

11. FILLING OF LONG HOSES BEFORE USE.

When long hoses are being used, it is difficult to remove all air in the hose simply by cycling the torque wrench back and forth as described in section 4. A quicker and more effective method is as follows. Connect the female end of one hose to the male coupler on the pump and connect the other end of the same hose to the remaining coupler of the pump. Switch the pump on and allow to run for a few seconds. Switch off and repeat the process with the other hose. After doing this remember to check the oil level in the reservoir.

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12. PRESSURE CONVERSION CHART

BAR	PSI	kgf/cm ²	BAR	PSI	kgf/cm ²
10	145	10.2	360	5221	367.2
20	290	20.4	370	5366	377.4
30	435	30.6	380	5512	387.6
40	580	40.8	390	5657	397.8
50	725	51	400	5802	408
60	870	61.2	410	5947	418.2
70	1015	71.4	420	6092	428.4
80	1160	81.6	430	6237	438.6
90	1305	91.8	440	6382	448.8
100	1450	102	450	6527	459
110	1595	112.2	460	6672	469.2
120	1740	122.4	470	6817	479.4
130	1886	132.6	480	6962	489.6
140	2031	142.8	490	7107	499.8
150	2176	153	500	7252	510
160	2321	163.2	510	7397	520.2
170	2466	173.4	520	7542	530.4
180	2611	183.6	530	7687	540.6
190	2756	193.8	540	7832	550.8
200	2901	204	550	7977	561
210	3046	214.2	560	8122	571.2
220	3191	224.4	570	8267	581.4
230	3336	234.6	580	8412	591.6
240	3481	244.8	590	8557	601.8
250	3626	255	600	8702	612
260	3771	265.2	610	8847	622.2
270	3916	275.4	620	8992	632.4
280	4061	285.6	630	9138	642.6
290	4206	295.8	640	9283	652.8
300	4351	306	650	9428	663
310	4496	316.2	660	9573	673.2
320	4641	326.4	670	9718	683.4
330	4786	336.6	680	9863	693.6
340	4931	346.8	690	10008	703.8
350	5076	357	700	10153	714

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Certificate of Conformity:**English**

The Manufacturer: **Hi-Force Limited**
Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom

Declare that: In accordance with 2006/42/EC – The Machine Directive:
Conform where applicable to the regulations of the following harmonised standards;
-EN ISO 12100:2010
-EN 4413: 2012

It is also declared that the relevant technical documentation has been drafted in accordance with annex VII B and it is agreed that, in response to an adequately justified request from the national authorities, all relevant information regarding the partly completed machines concerned will be passed on to them. The manufacturer also declares that the person authorised to pass on the relevant technical documentation is:

Mr. M. Dalley – Engineering Manager.

Important Note: The above machines, although complete in themselves can be incorporated into other systems and components and must not be put into operation until the final machines they are to be incorporated into have been declared as conforming to all the regulations of the above directive 2006/42/EC on the Safety of Machinery.

German

Der Hersteller: **Hi-Force Limited**
Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom

Erklärt dass: In Übereinstimmung mit der Maschinenrichtlinie 2006/42/EC:
Entsprechend die Regularien der harmonisierten Normen angewendet werden:
-EN ISO 12100:2010
-EN 4413: 2012

Die speziellen technischen Unterlagen gemäß Anhang VII Teil B wurden erstellt. Der Bevollmächtigte für das Zusammenstellen der technischen Unterlagen verpflichtet sich, die Unterlagen auf begründetes Verlangen an die einzelstaatlichen Stellen zu übermitteln. Für die Zusammenstellung der technischen Unterlagen ist bevollmächtigt:

Mr. M. Dalley – Engineering Manager

Die Inbetriebnahme des Produkts ist so lange untersagt, bis festgestellt wurde, dass die Maschine, in die das oben genannte Produkt eingebaut wird, allen grundlegenden Anforderungen der Maschinenrichtlinie entspricht.

Das oben genannte Produkt erfüllt die Anforderungen der folgenden einschlägigen Richtlinien:

French

Le fabricant: **Hi-Force Limited**
Prospect Way, Daventry (Northamptonshire) NN11 8PL
Royaume-Uni

Conformément à la Directive 2006/42/EC relative aux machines, déclare.
Se conformer aux réglementations des normes harmonisées suivantes, si applicables :
-EN ISO 12100:2010
-EN 4413: 2012

Nous déclarons en outre que la documentation technique correspondante a été rédigée conformément à l'annexe VII partie B, et toutes les informations relatives aux machines complètes et/ou parties des machines pourront être fournies sur demande motivée des autorités nationales compétentes. Le fabricant déclare par ailleurs que la personne autorisée en charge de fournir la fiche technique est :

M. M. Dalley – Directeur technique.

DÉCLARATION DE CONFORMITÉ : Note importante : les machines susnommées, bien que pouvant être utilisées seules, peuvent aussi être incorporées à d'autres systèmes et composants ; le cas échéant elles ne doivent pas être mises en service avant que les machines finales soient déclarées conformes à la directive 2006/42/EC sur la sécurité des machines.

Netherlands

De fabricant: **Hi-Force Limited**
Prospect Way - Daventry - Northamptonshire NN11 8PL
Engeland – Verenigd Koninkrijk

Verklaren dat: In overeenstemming met De Machinerichtlijn 2006/42/EG :
Overeenstemmen met de voorschriften van de volgende geharmoniseerde normen (indien van toepassing)
-EN ISO 12100:2010
-EN 4413: 2012

Tevens verklaren wij dat de relevante technische documentatie is opgesteld overeenkomstig bijlage VII B en dat, in reactie op een voldoende gemotiveerd verzoek van de nationale autoriteiten, alle relevante informatie met betrekking tot de betreffende gedeeltelijk en / of complete machines verstrekt zullen worden. De fabrikant verklaart tevens dat de volgende persoon gemachtigd is om te de relevante technische documentatie te verstrekken:

Dhr. M. Dalley - Engineering Manager

VERKLARING VAN OVEREENSTEMMING: Belangrijke opmerking: De bovenstaande machines, hoewel op zichzelf volledig, kunnen in andere systemen en componenten kunnen worden opgenomen in welk geval deze

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complete machine / installatie niet in werking genomen mag worden, totdat de volledige machine / installatie waarin bovenstaande producten worden opgenomen, voldoet aan alle veiligheidsvoorschriften van de bovengenoemde Richtlijn 2006/42/EG.

ItalianIl Produttore: **Hi-Force Limited****Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom**

Dichiara che: In conformità con 2006/42 / CE - Direttiva Macchine:

Ottimera, laddove applicabile, alle disposizioni delle seguenti norme armonizzate;

-EN ISO 12100:2010

-EN 4413: 2012

Si attesta, inoltre, che la

Documentazione tecnica

Pertinente è stata redatta in conformità dell'allegato VII B e si è convenuto che, in risposta a una richiesta adeguatamente giustificata da parte delle autorità nazionali, per quanto riguarda la quasi-macchina e / o la macchina completa interessata verranno loro trasmesse tutte le informazioni utili. Il produttore dichiara, inoltre, che la persona autorizzata a trasmettere la documentazione tecnica pertinente è:

Mr. M. Dalley – Engineering Manager.

DICHIARAZIONE DI CONFORMITA': Nota importante: Le macchine di cui sopra, anche se di per sé complete, possono essere incorporate in altri sistemi e componenti e non devono essere messe in funzione fino a quando le macchine finali in cui devono essere incorporate siano state dichiarate conformi a tutte le normative della Direttiva 2006/42 / CE sulla Sicurezza Macchine sopra indicata.

SpainEl Fabricante: **Hi-Force Limited****Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom**

Declara que: En conformidad con la Directiva de Máquinas 2006/42/EC:

Cumplen cuanto aplica de las siguientes Normas Armonizadas aplicadas:

-EN ISO 12100:2010

-EN 4413: 2012

También se declara que la pertinente documentación técnica ha sido redactada de acuerdo al anexo VII B, y se ha convenido en respuesta a una solicitud debidamente justificada de las autoridades nacionales, que toda la información correspondiente relativa a la casi máquina y/o a la máquina completa será pasada a ellos. El fabricante también declara que la persona autorizada para transmitir la documentación técnica correspondiente es:

Sr. M. Dalley – Director de Ingeniería

DECLARACIÓN DE CONFORMIDAD: Nota Importante: Las máquinas anteriormente citadas, aunque completas en sí mismas, pueden ser incorporadas en otros sistemas y componentes y no deben ser puestas en funcionamiento hasta que, las máquinas finales en las que hayan sido incorporadas hayan recibido declaración de conformidad con todas las normas de la directiva arriba indicada 2006/42/CE relativa a la seguridad de las máquinas.

PortugalO fabricante: **Hi-Force Limited****Prospect Way-Daventry-Northamptonshire NN11 8PL
Reino Unido**

Declara que: de acordo com a Directiva 2006/42/CE relativa às máquinas:

Conforme aquando aplicável às regulações das seguintes normas harmonizadas;

-EN ISO 12100:2010

-EN 4413: 2012

Declara-se que a relevante documentação técnica foi redigida em conformidade com o anexo VII B e foi acordado que, em resposta a uma solicitação justificada adequadamente pelas autoridades nacionais, toda a relevante informação respetiva a partes das máquinas e/ou a máquinas completas correspondentes será transmitida às mesmas. O fabricante declara também que a pessoa autorizada a transmitir a documentação técnica relevante é:

Sr. M. Dalley – Engenheiro Responsável

DECLARAÇÃO DE CONFORMIDADE: nota importante: mesmo que as máquinas constituam uma componente própria supramencionada, estas podem ser incorporadas em outros sistemas e componentes e não devem ser colocadas em funcionamento antes que as máquinas finais, nas quais as mesmas serão incorporadas, tenham sido declaradas em conformidade com todos os regulamentos da Directiva 2006/42/CE relativa à segurança das máquinas.

Russia

Prepared by:-	Mark Dalley	Approved by:-	Martin Davies	Date:23/06/15
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Производитель: **Hi-Force Limited**

**Адрес: Prospect Way-Daventry-Northamptonshire NN11 8PL
Великобритания**

Заявляется следующее: в соответствии с Директивой 2006/42/ЕС о безопасности машин и оборудования:

Соответствие по необходимости положениям следующих согласованных стандартов:

-EN ISO 12100:2010

-EN 4413: 2012

Также заявляется, что соответствующая техническая документация была составлена в соответствии с Приложением VII B, а также согласовано, что в ответ на обоснованный запрос о предоставлении информации со стороны федеральных регулирующих органов, такая информация относительно машин, изготовленных частично и/или полностью, фигурирующих в запросе, будет передана. Производитель также заявляет, что лицом, уполномоченным осуществить передачу документации, назначен:

Руководитель отдела проектирования, г-н M. Dalley

ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ: Важное примечание: Вышеуказанные полностью укомплектованные механизмы могут быть внедрены в другие системы и компоненты, и не допускаются к эксплуатации до момента согласования окончательно укомплектованных механизмов на предмет

полного соответствия положениям вышеуказанной директивы 2006/42/ЕС о безопасности машин и оборудования

Sweden.

Tillverkaren: **Hi-Force Limited**

Prospect Way-Daventry-Northampton NN11 8PL

United Kingdom

Fastställande att: I enlighet med 2006/42 / EG - maskindirektivet:

Bekräftat i förekommande fall till bestämmelserna av följande harmoniserade standarder;

-EN ISO 12100:2010

-EN 4413: 2012

Det är också förklarande att relevant teknisk dokumentation har upprättats i enlighet med bilaga VII B och är överensstämmande som svar på en tillräckligt motiverad begäran från de nationella myndigheterna och att all relevant information om den delvis, berörda och / eller genomförda maskiner kommer föras vidare till dem. Tillverkaren försäkrar också att den person som är behörig att vidarebefodra den relevanta tekniska dokumentationen är:

Mr M. Dalley - Engineering Manager.

Försäkran om överensstämmelse: Viktigt: Ovanstående maskiner, även om fullständig i sig kan införlivas i andra system och komponenter får inte tas i bruk förrän de sista maskinerna har införlivats och har förklarats som uppfyller alla förordningar ovan nämnda direktiv 2006/42 / EG om säkerheten av maskiner.

Denmark

The Manufacturer: **Hi-Force Ltd**

Prospect Way-Daventry-Northamptonshire NN11 8PL

United Kingdom

I overensstemmelse med Maskindirektivet 2006/42/EF bilag. II. B

Følgende harmoniserede standarder er anvendt.

-EN ISO 12100:2010

-EN 4413: 2012

Maskinen opfylder de grundlæggende sundhedsmæssige og sikkerhedsmæssige krav med hensyn til design og udformning i overensstemmelse med bilag. 1.

Den relevante tekniske dokumentation er udarbejdet i overensstemmelse med bilag. VII. B, og denne dokumentation eller dele heraf kan sendes elektronisk, hvis de nationale myndigheder kræver det.

Denne person, der er autoriseret til at udfylde den relevante tekniske dokumentation

Mr. M. Dalley – Engineering Manager.

Overensstemmelseserklæring: Denne maskine, selvom den er færdiggjort, må ikke anvendes, før den endelige maskine, som den skal indbygges i, er erklæret i overensstemmelse med dette direktiv 2006/42/EF, maskinsikkerhed.

Finland

Valmistaja: **Hi-Force Limited**

Prospect Way-Daventry-Northamptonshire NN11 8PL

United Kingdom

EY-vaatimuksen mukaisuusvakuutus koneidirektiivin 2006/42/EC mukaan:

On käytetty soveltuvin osin seuraavia harmonisoituja standardeja;

-EN ISO 12100:2010

-EN 4413: 2012

Tuotteeseen liittyvät tekniset asiakirjat on laadittu liitteen VII B mukaisesti ja kansallisten viranomaisten perustettujen pyyntöjen

mukaan toimitetaan tarvittavat asiakirjat koneista ja niiden osista. Valmistajan puolelta näiden tietojen antamiseen on valtuutettu:

Mr. M. Dalley- tekninen johtaja

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VAATIMUKSEN MUKAISUUSVAKUUTUS : Tärkeä huomautus: Yllä olevat koneet, vaikka ovat itsellisesti toimintakelpoisia ja voidaan sisällyttää muihin koneisiin ei saa ottaa käyttöön ennen kuin lopullinen kone johon ne on sisällytetty on todettu täyttävän Konedirektiivin 2006/42/EC vaatimukset

NorwayProdusent: **Hi-Force Limited****Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom**

Erklærer herved: I overensstemmelse med 2006/42/EC-Maskin Direktivet:

Samsvarer i henhold til gjeldende forskrifter av følgende harmoniserte standarder:

-EN ISO 12100:2010

-EN 4413: 2012

Det erklæres også at all relevant teknisk dokumentasjon har blitt utarbeidet i henhold til Annex VII B og det er enighet om, som svar til en tilstrekkelig begrunnet forespørsel fra de Nasjonale myndigheter, at all relevant informasjon angående maskiner, komplett og/eller i deler, vil bli viderefornidlet til dem. Produsenten erklærer også at personen med autorisasjon som skal viderefornidle relevant teknisk dokumentasjon er:

Mr. M. Dalley – Engineering Manager

SAMSVAR SERKLÆRING: Viktig melding: Ovennevnte maskiner som er komplette kan også brukes som en del av et større system og må derfor ikke settes i operasjon før hele systemet samsvarer med reguleringene i Maskin Direktivet 2006/42/EC i forhold til sikker bruk.

PolandProducent: **Hi-Force Limited****Prospect Way-Daventry-Northamptonshire NN11 8PL
United Kingdom**

Oświadczam, że: zgodnie z 2006/42/WE – Dyrektywą Maszynową:

W stosownych przypadkach zgodne z przepisami następujących norm zharmonizowanych;

-EN ISO 12100:2010

-EN 4413: 2012

Oświadczam, że odpowiednia dokumentacja techniczna została sporządzona zgodnie z załącznikiem VII B i zostało uzgodnione, że w odpowiedzi na odpowiednio uzasadniony wniosek władz krajowych, wszystkie istotne informacje dotyczące części i / lub całości danej maszyny będą przekazywane do nich. Producent deklaruje również, że osobą upoważnioną do przekazywania odpowiedniej dokumentacji technicznej jest:

Pan M. Dalley – Główny Inżynier

DEKLARACJA ZGODNOŚCI: Ważna uwaga: Powyższe maszyny, choć kompletne same w sobie mogą być włączone do innych systemów i komponentów nie mogą jednak zostać oddane do użytku do czasu, aż ostateczne urządzenie do którego są włączone nie zostanie uznane za zgodne ze wszystkimi przepisami powyższej dyrektywy 2006 /42/WE w sprawie Bezpieczeństwa Maszyn.

TurkeyÜretici: **Hi-Force Limited****Prospect Way – Daventry- Northamptonshire NN11 8PL
United Kingdom**

Beyan: 2006/42/EC – Makine Direktifine uygun olarak

Aşağıdaki uyumlaştırılmış standartların düzenlemesine uygulanabilir olduğunu onaylar.

-EN ISO 12100:2010

-EN 4413: 2012

Ayrıca ek VII B'ye uygun olarak konu ile ilgili teknik belgenin planlandığını beyan eder ve milli yetkililerden yeterince haklı isteğe karşılık kısmen ve / ya da tamamlanmış ilgili makineler hakkında konu ile ilgili tüm bilgilerin onların üzerine geçirileceği kabul edilir. Üretici ayrıca yetkili kişinin ilgili teknik belgeyi üzerine geçireceğini beyan eder.

M.Dalley – Mühendislik Müdürü

Uygunluk Beyanı: Önemli Not: Tamamen diğer sistemlerle ve bileşenlerle birleştirilmesine rağmen yukarıdaki makineler, Makine Güvenliği hakkında 2006/42/EC yukarıdaki direktifin tüm düzenlemesini teyit ederek birleştirilecek son makineler beyan edilene kadar işleme alınmamalıdır.

Prepared by:-	Mark Dalley	Approved by:-	Martin Davies	Date:23/06/15
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UK Head Office:

**Hi-Force Limited
Prospect Way, Daventry, Northamptonshire
NN11 8PL
United Kingdom**

**Tel: + 44 1327 301000
Fax: + 44 1327 706555
Email: daventry@hi-force.com**

Hi-Force Regional Offices:

**Hi-Force Caspian
Baku
Azerbaijan
Tel: +994 12 447 4100
Email: baku@hi-force.com**

**Hi-Force S.r.l.
Milan
Italy
Tel: +39 0253 031 088
Email: italy@hi-force.com**

**Hi-Force Hydraulics (Asia) S.B
Selangor
Malaysia
Tel: +603 5525 4203
Email: malaysia@hi-force.com**

**Hi-Force Nederland BV
Strijen
Netherlands
Tel: +31 78 674 5488
Email: holland@hi-force.com**

**Hi-Force Hydraulics (Pty) Ltd
Midrand
South Africa
Tel: +27 11 314 0555
Email: south.africa@hi-force.com**

**Hi-Force Aberdeen
Aberdeen
United Kingdom
Tel: +44 1224 973 512
Email: dubai@hi-force.com**

**Hi-Force Hydraulics
Abu Dhabi
United Arab Emirates
Tel: +971 2 551 3100
Email: abu.dhabi@hi-force.com**

**Hi-Force FZCO
Dubai
United Arab Emirates
Tel: +971 4 815 0600
Email: dubai@hi-force.com**

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