

HYDRALOK 扣压机用户使用手册

型号：H25MM



承蒙选购本公司的胶管扣压设备，深表感谢！为使您能有效使用本设备，

请在使用之前仔细阅读本说明书并妥善保管好！

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产品质量保证说明 WARRANTY CONDITIONS

1. 所有机器装运前均经过检测。All our machines are tested before shipment.
2. 自购买之日起，所购机器享有 12 个月的质保期。本公司保留要求客户出示销售发票副本的权力。All machines are warranted against any defects for a period of 12 MONTHS starting from the date of delivery to the customer. The company reserves the right to require a copy of the sales invoice.
3. 该质保声明包括在质保期内享有维修和更换任何确实存在缺陷的零部件的权益。This warranty covers replacement and/or repair of any component found to be defective.
4. 该质保声明下的维修和更换在 12 个月质保期满后不再延续。Replacements and repairs completed under this warranty do not extend the 12 months validity.
5. 声明不包括由于使用不当或未能按照机器使用说明进行操作而引起的损坏。This warranty is not valid for damage resulting from incorrect operation, or use not in compliance with the machine instructions.
6. 该质保声明不包括用户私自改装以后的机器。该质保声明不包括用户私自改装以后的机器。This warranty is not valid in case of unauthorised machine modification.
7. 该指南应当被作为产品质量保证的证明被保留。This Instruction Manual should be retained as proof of warranty

ENDEAVOUR INTERNATIONAL LTD.

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CE

DECLARATION OF INCORPORATION.

<p style="text-align: center;">MANUFACTURER</p>
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ENDEAVOUR INTERNATIONAL LTD.
13 THE MALTINGS INDUSTRIAL ESTATE.
BATH.
ENGLAND.
BA1 3JL.

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MACHINERY DESCRIPTION.

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An eight-segment hose assembly swaging head.

MODEL: - H25MM

SERIAL NO.

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警告 WARNING.

机器仅在与指示组装一致，才被提供维修。This machinery must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Directive.

总工程师 Engineering Director.

安全操作条款 SAFETY REGULATIONS

必须保证机器安放在平稳适当的工作平台上。Place the machine on a stable and appropriate working surface

1. 未详细阅读此用户手册之前，请您不要使用机器。DO NOT USE the equipment before reading the user manual.
2. **请注意危险！**如果使用不当，机器有可能造成损伤。请不要触碰任何处于工作状态的机器部件。CAUTION! If improperly used, the equipment may be dangerous and may cause injury. Do not touch any moving parts.
3. **请注意！**所有操作应当由一人来完成。CAUTION! It is absolutely essential that all working operations are carried out by one operator only
4. 操作人员必须阅读本手册。This manual must be provided for the machine operator
5. 防护装置不可去除或更改。Guards must never be removed or tampered with.
6. 如有可能，应当由能胜任的电工连接适合的电源。(Where applicable) A fully trained and competent electrician must connect the machine to the appropriate electricity supply.
7. 请始终穿戴工作服，保护手套，和防护眼镜。Always wear protective gloves, safety glasses and appropriate clothing.
8. 如有可能，在打开机盖或进行机器维修之前，请先切断电源。(Where applicable) Disconnect the power supply before removing any covers, or attempting any maintenance of the machine
9. 只有原装配件才能用于机器的维修。Only original spare parts can be used in the maintenance of the machine.

TECHNICAL/DIMENSIONAL DATA	H25MM
规格 Capacity	3/16 英寸-11/4 英寸 (两层 钢丝软管 2 wire) R1AT & R2AT 3/16 英寸-1 英寸 (四层钢 丝软管 4 wire) R9R/4SP
包装后尺寸 (mm) Packed Dimensions in mm (不包括可选的压力系统 Excluding optional power packs)	520x730x800
控制 Controls	变速手动加压杆操纵 Twin speed hand pump (10,000 psi)
可选用气/液压压力系统的压力 Pressure requirements for optional air/hydraulic power pack	7 bar (100 psi)
重量不包括可选的压力系统 Weight (Kg) without optional power pack	60
噪音量 Noise level	不超过 Not exceeding 70dB

装卸/搬运注意事项 HANDLING/TRANSPORT

机器通常封装在木箱之中。将机器的封定装置拆除后应当使用合适的起重设备将机器置于工作平台之上。The machine will normally be shipped bolted to a wooden pallet. The bolts should be removed and the machine lifted onto the work place using suitable lifting equipment.

预备检测 PRELIMINARY CHECKS

将机器置于平稳的工作平台之上。Place the machine on a stable surface.

如有可能，确保有一个与电源线路适配的自动保险电门，在电流超载时能自动切断电路。Where applicable, ensure that the power supply line is fitted with a differential safety breaker and overload cut-out.

照明 LIGHTING

机器本身并不带照明装置，因此应当在适宜的照明条件下进行操作。The equipment does not have its own lighting and so it must be used in a suitably illuminated area.

日常维护 ROUTINE MAINTENANCE

保证经常给活动部件上润滑油。Ensure that moving parts are always lightly greased.

如有可能，定期检查限定开关与紧急按钮，确保其运行正常。Where applicable check periodically that the limit switches and emergency controls are in good working order.

操作指南 OPERATING INSTRUCTIONS.

该机器是由手动加压杆操纵。当释压阀关闭且用加压杆操纵时，扣压头将合拢，完成软管的扣压。A hand operated hydraulic pump operates the machine. When the release valve is closed and the pump operated, the swaging head will close and a hose assembly can be swaged.

旋开释压阀两圈，取出扣压后的胶管。To release the finished assembly unscrew the release valve two turns.

为了操作机器请从模具表中选择并安装合适的模具。To operate the machine, select and fit the correct die set from the die selection chart.

在千分尺校准器上设置目标数据，将所要达到的扣压后尺寸减去所选择的模具尺寸，得出的便是目标数据。例如，要达到扣压后 25.4mm，应当使用 L22（22 mm—25.9mm）的模具。 $25.4 - 22 = 3.4$ ，因此，在校准器上设置的目标数据应为 3.4mm。Set the calibration micrometer to read the difference between the required finished swage size and the die set size. E.g. To swage a finished size of 25.4mm, select die set 22 for 22-25.9mm size range. Subtract 22 from 25.5. Set the calibrator to 3.5mm.

关闭释压阀，操纵加压杆，机头模具收口，扣压胶管。Close the release valve and operate the pump to close the dies onto the assembly to be swaged.

操纵加压杆直到校准器的心轴（图 3，部件 1）与校准器的顶针（图 3，部件 2）的底端在同一水平面上，这样，扣压就完成了。打开手动杆的释压阀，取出扣压好的软管。核实扣压后的尺寸，尤其是在扣压大型液压软管时，当扣压好的软管从扣压机中取出，进行“自动反弹”。Operate the pump until the calibrator spindle (item 1 fig 3) is level with the end of the calibrator thimble (item 2 fig 3) The swage is now complete. Open the release valve on the hand pump to allow removal of the swaged assembly. The finished assembly should be checked for size especially in the case of larger hydraulic hose assemblies where some “spring back” may occur after the assembly is removed from the machine.

维修保养工作 MAINTENANCE AND SERVICE.

机器正常使用下建议每月检查油位。要检查油位，首先应确保扣压机头完全扩开，然后打开操纵杆背面的油箱塞子。油位应当与连杆处在同一水平面上，油通过操纵杆的运作流入机头。

如果需要，可填加型号为 SAE 10 的国际标准液压油，**但请注意填加时不要将油溢出**。For machines in regular use it is recommended that a monthly check on the oil level in the pump be carried out. To check oil level, first ensure the machine is fully open and then remove the oil filler plug at the rear of the pump. The oil should be level with the top of the tie rod running centrally through the body of the pump. If required add SAE 10 hydraulic oil. DO NOT OVER FILL.

机头的滑槽应当定期用特定含二硫化钼的润滑剂进行润滑上油。The sliding surfaces of the machine must be regularly lubricated with molybdenum disulfide based grease.

建议每年重新校验扣压机头，以保证扣压精度。At yearly intervals it is recommended that the calibration of the machine be checked in accordance with the calibration instructions.

FIG.1

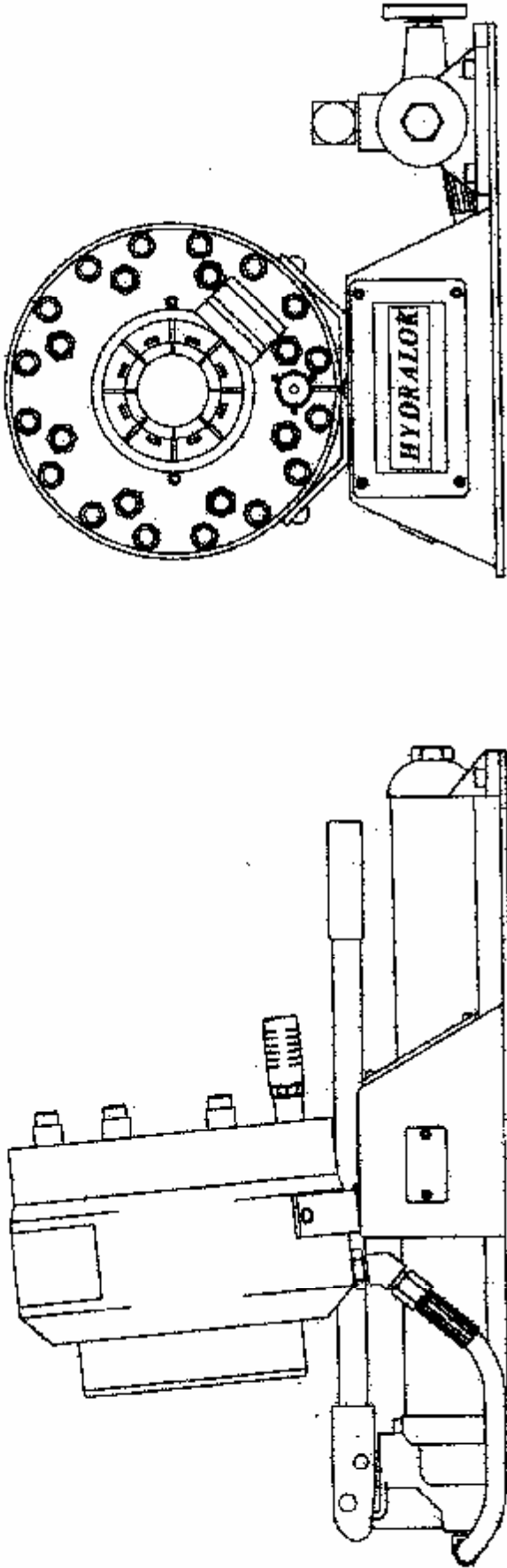


FIG.2
DIE FITTING INSTRUCTIONS

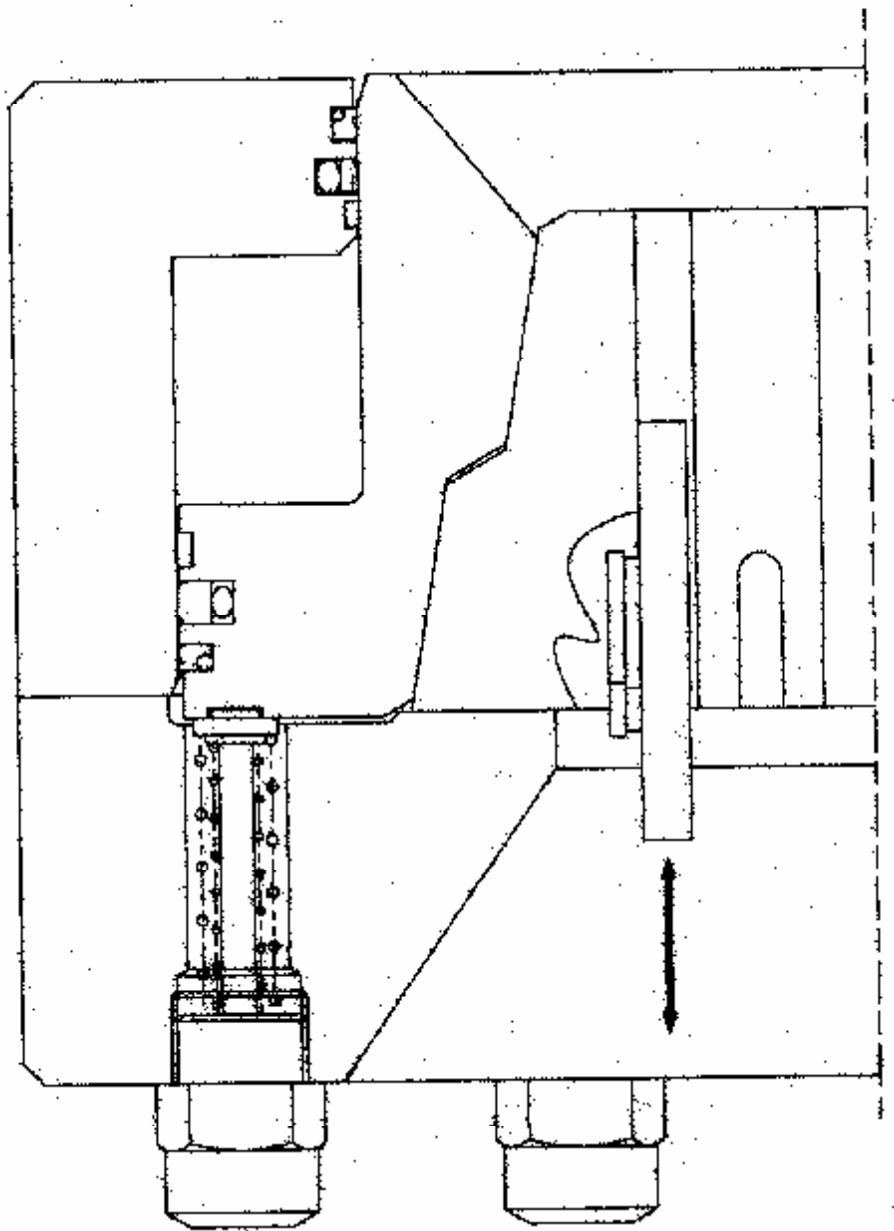
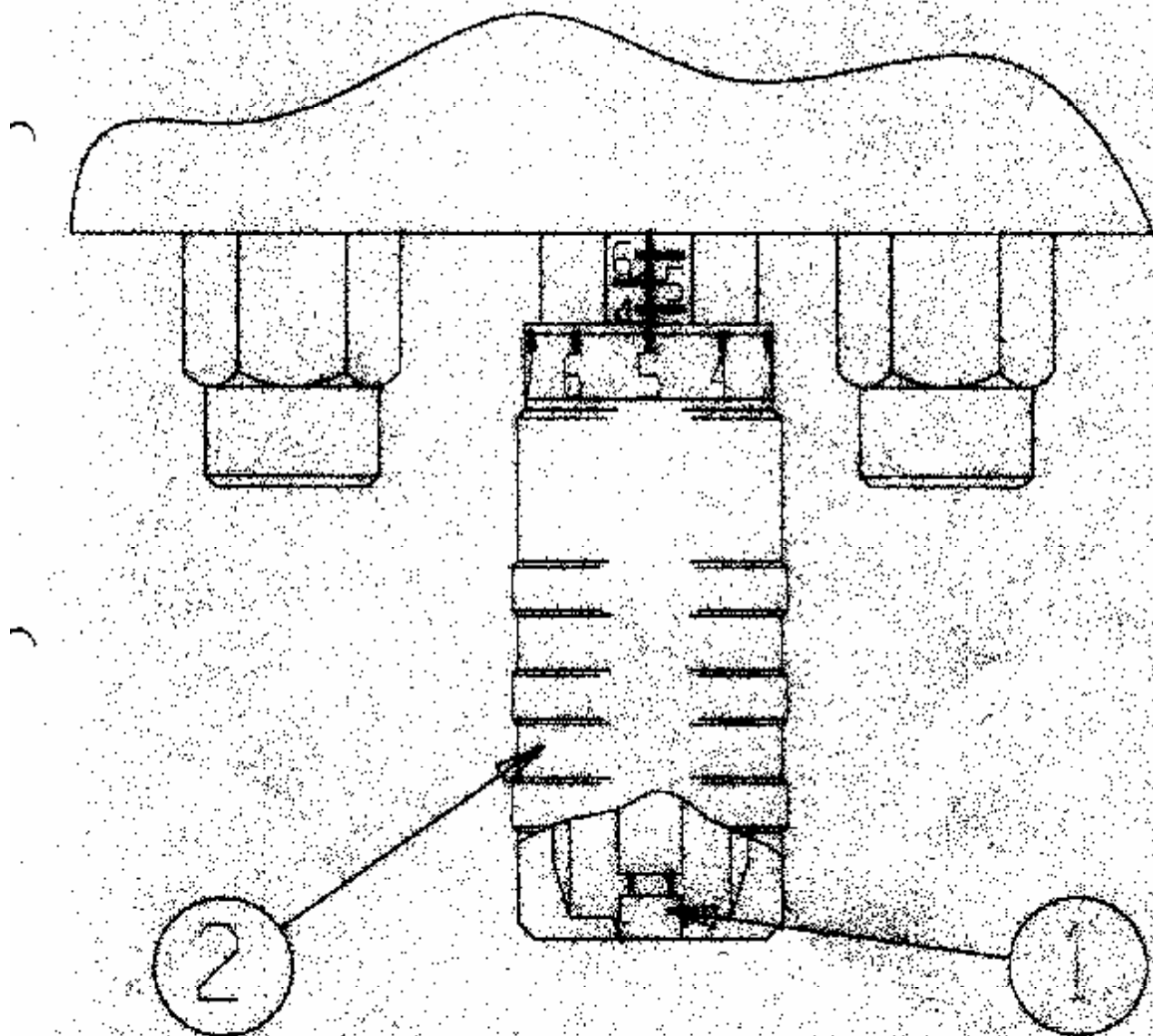


FIG. 3



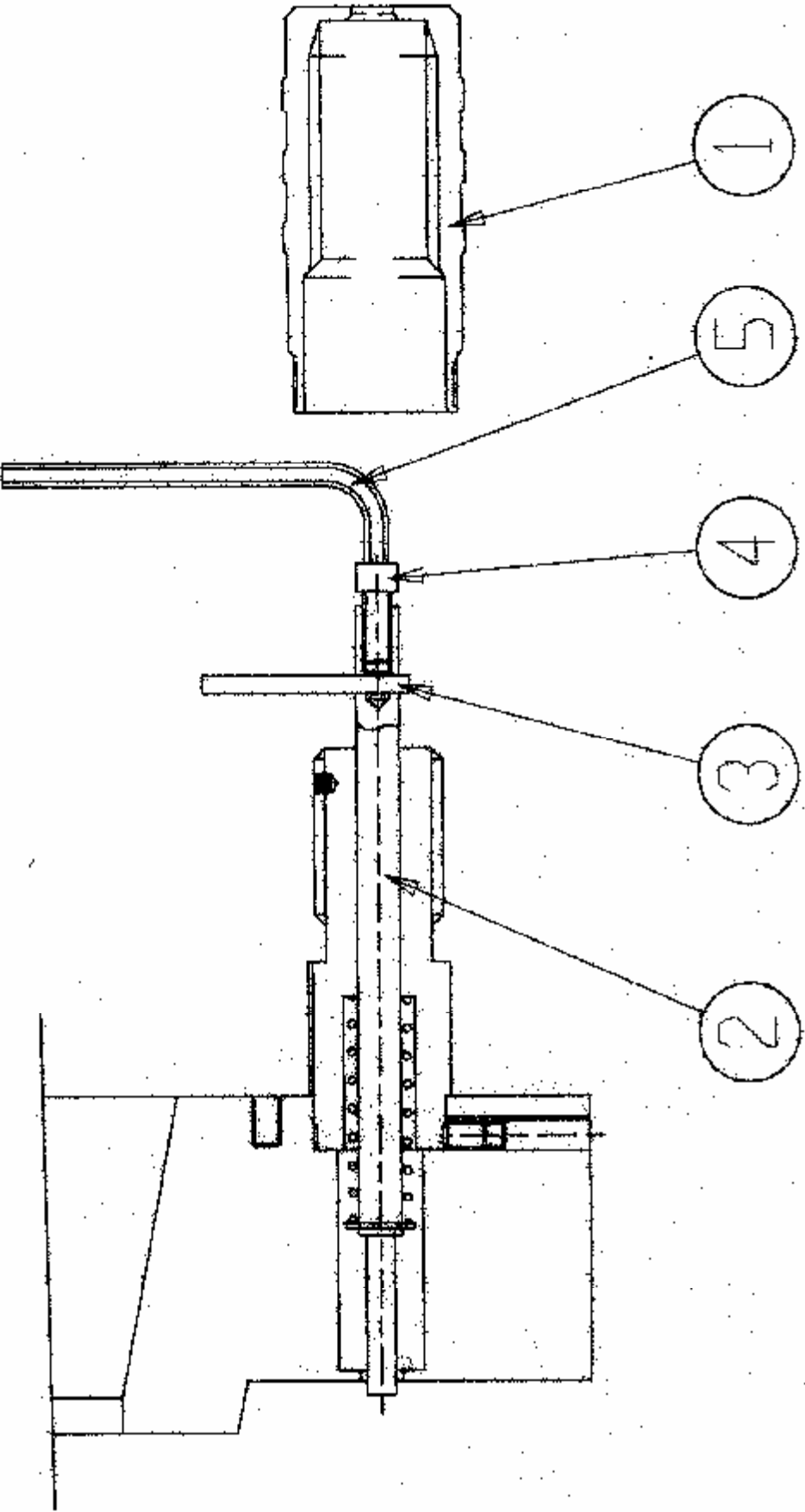
模具号

模具号	扣压范围 (mm)	扣压长度	最大张开直径
*H06	6.0 - 7.9	40.00	18.00
*H08	8.0 - 9.9	40.00	20.00
*H10	10.0 - 12.9	40.00	22.00
*H13	13.0 - 15.9	40.00	25.00
H16	16.0 - 18.9	40.00	28.00
*H19	19.0 - 21.9	40.00	31.00
H22	22.0 - 25.9	50.00	34.00
*H26	26.0 - 29.9	50.00	38.00
H28	28.0 - 33.9	60.00	40.00
*H30	30.0 - 33.9	60.00	42.00
H34	34.0 - 39.9	70.00	46.00
H40	40.0 - 45.9	70.00	52.00
*H46	46.0 - 51.9	75.00	58.00
*H52	52.0 - 57.9	75.00	64.00
打*号不作为标准模具提供			

重新校验 RECALIBRATION (图 5)

1. 安装一套适当的模具。Fit a die set from the mid range of the machine.
2. 进行扣压，并测量扣压后的尺寸。Produce a swage and measure the finished swage size.
3. 在校准器上设置新的目标数据，将所要达到的扣压后尺寸减去所选择的模具尺寸，得出的便是目标数据。Re-set the calibrator to read the difference between the swage size and the die size.
4. 测量校准器上心轴与顶针的距离。Measure how far the calibrator spindle is from the end of the thimble.
5. 取走校准器的顶针（图 5， 部件 1） Remove the calibrator thimble (item1 fig 5)
6. 稳固的固定心轴，使用 3mm 六边形的扳手调节螺丝，调节校准器上心轴与顶针的距离（见步骤 4）。旋转一周的调节长度为 0.7mm。Hold the spindle firmly and using a 3mm hexagon wrench adjust the adjusting screw the amount that the calibrator spindle was away from the thimble (see step 4). One full turn will adjust the length by 0.7mm.
7. 重新调节顶针到先前的位置来检测。Replace the thimble and adjust to the previous position to verify adjustment.
8. 如果心轴的底部与顶针成一条直线，则校验无误。If the end of the spindle is in line with the thimble then the calibration of the machine is correct.
9. 设置调节器至中间范围，进行测试扣压。校验总成后的尺寸。Set the calibrator to mid range and produce a trial swage. Measure the finished size to verify calibration.

FIG 4



SPA**机头配件清单 HEAD PARTS LIST**

以下机头内的配件名称适用于 H25M 系列机型

Spare parts are available for H25M (Manual) series machines as listed below.

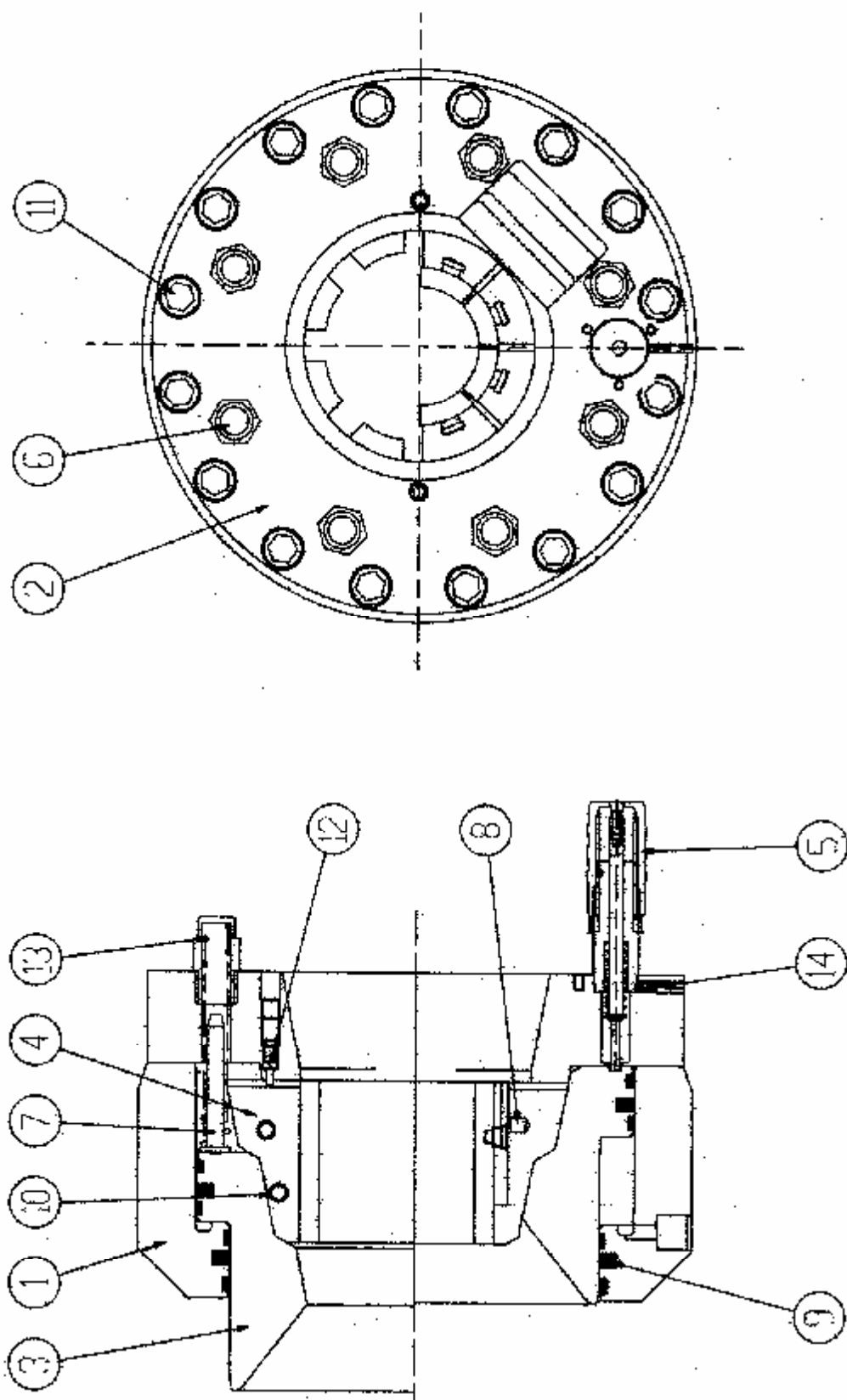
请参阅以下图表以便保证以后能提供正确的配件。

Please refer to the diagram to ensure that the correct spare part is supplied.

H25M 手册**图表.6**

Item No.	Description	Quantity
1	Cylinder	1
2	End plate	1
3	swaging ring	1
4	Die holder	1 set
5	Calibrator	1
6	Spring cap	8
7	Spring pin	8
8	Spring locator	8
9	Oil seals	1 set
10	Die holder spring	1 set
11	Socket cap screw	16
12	Location pin assembly	2
13	Return spring	1 set
14	Location Screw	1

H25M MANUAL
FIG.6



可选用的气/液压加压系统（700 公斤压强）

OPTIONAL AIR/HYDRAULIC POWER PACK (700 BAR.)

安装指南 SETTING INSTRUCTIONS.

按照指示将胶管的一头连接扣压头，另一头连接泵的出口。确保胶管的最大加压为 700Bar。Connect the hose from the Swaging Head to the outlet connection of the pump as indicated. Ensure pressure rating of the hose is suitable for 700 Bar operation.

空气供给 AIR SUPPLY.

根据指南在脚踏泵的空气进口处接入空气源。Connect a suitable air supply to the air inlet connection of the foot pump as indicated.

注意：操作压的最大值限制在 7 Bar (100psig)。N.B. The air must be supplied using a filtered and lubricated supply, regulated to a MAXIMUM operating pressure of 7 Bar (100psig).

操作压力系统 OPERATING THE POWER PACK.

根据操作指南安装扣压机。Set the Swaging Machine as stated in the operating manual.

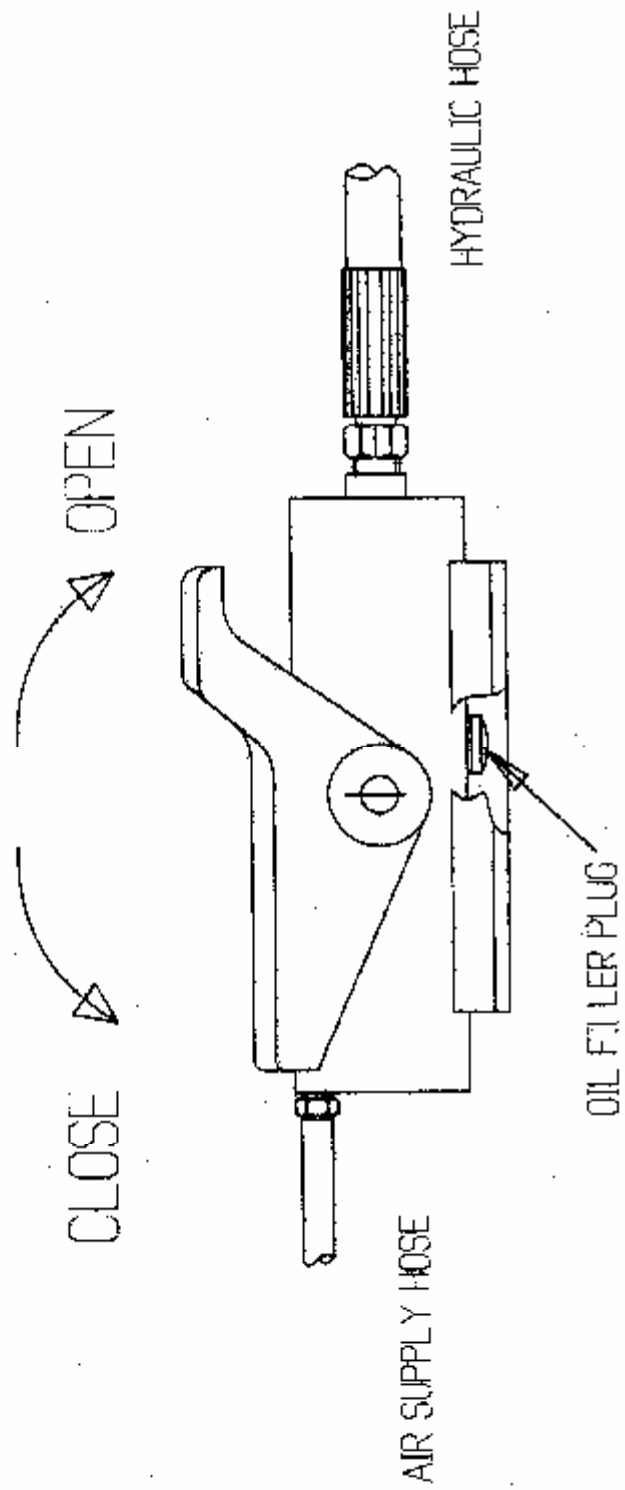
踩脚踏板合拢扣压机头，完成扣压。Press down the Foot Pedal to close the head and perform the swage.

当刻度指示器指向规定的位置，放开脚踏板。Release the Foot Pedal when the Calibration Indicator reaches its set position.

踩脚踏板的“释放部位”， 扩开扣压机头。To open the Head press down on the release part of the Foot Pedal.

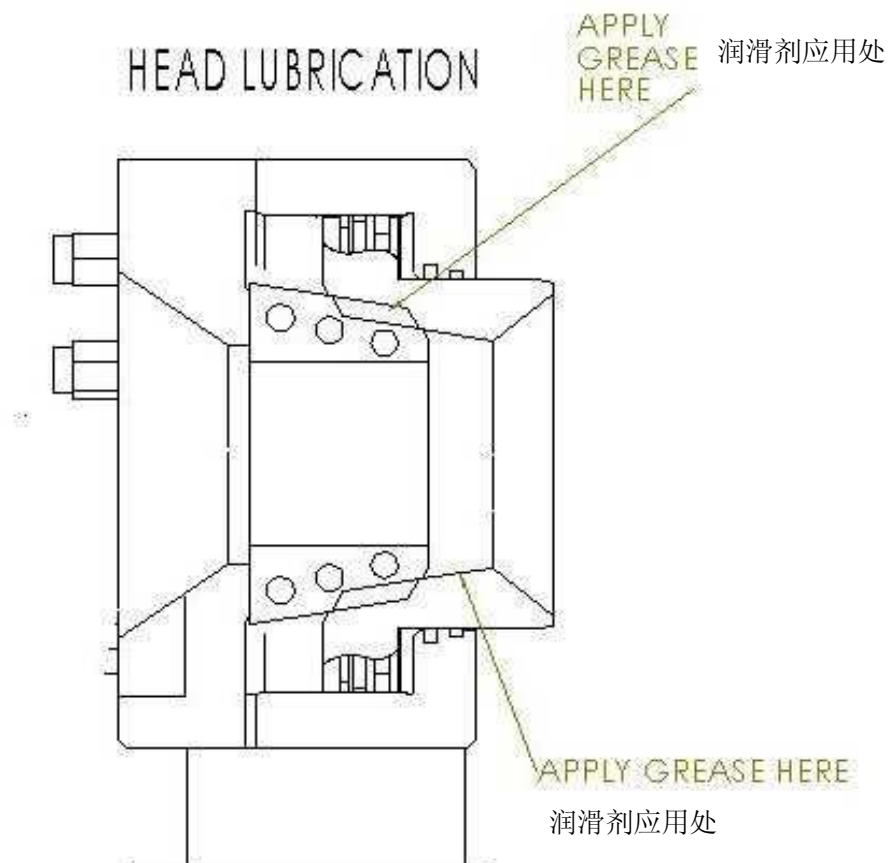
扣压机头不需要每次被完全扩开，通过松开脚踏板，可在任何位置停止扣压机头继续扩开。The head need not be fully opened after each operation and can be stopped at any position by releasing the Foot Pedal.

AIR - HYDRAULIC FOOT PUMP



怎样使用润滑剂 How to use the grease

SECTION 4



1. Lubrication. 润滑指示

2. It is important to lubricate at least once per day;
每天至少润滑一次，以在每次需大批量扣压之前润滑最佳。

3. Lubricate as indicated above, with head partly open;

如图所示，润滑时机头必须张开一些；然后按照图示位置涂抹润滑脂，即 8 个模具底座之间以及银白色的缸套内部。只要涂上适量的润滑剂，机头常摩擦，易磨损的部位表面就会马上形成一层薄薄的保护膜，这时应当启动机器，使机头做“开-合-开-合”的空载运动 10-15 分钟，使得润滑剂得以充分接触表面。

4. If the die holder segments move irregularly this indicates lack of lubrication;
如果模具块向外扩开时出现不规则，不均匀的现象，则说明已经缺少润滑；

5. Damage could well occur if you do not use the correct lubricant and procedure.

如果使用非本公司提供的不恰当的润滑剂，或润滑时没有按照上述的正确方法，都会引起机器损坏，严重影响扣压。