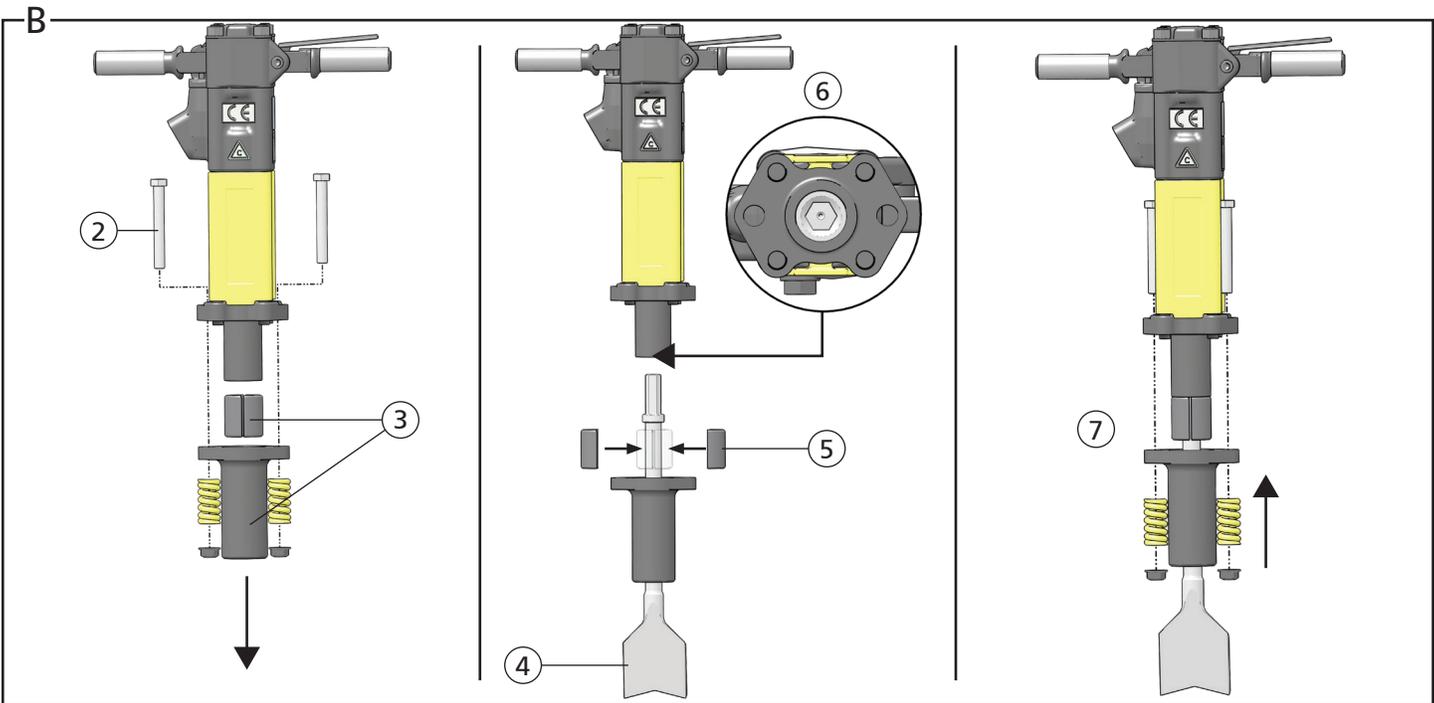
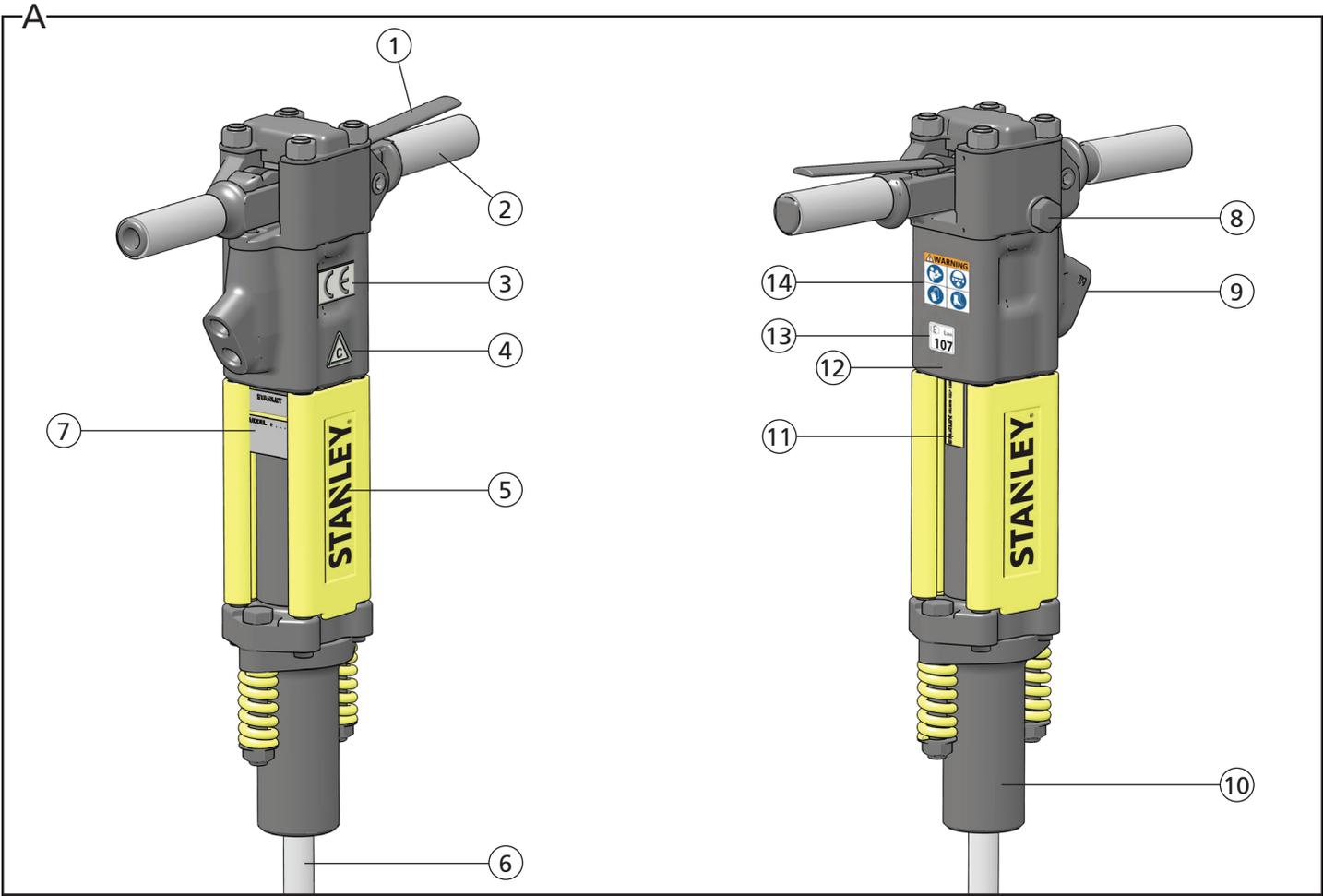
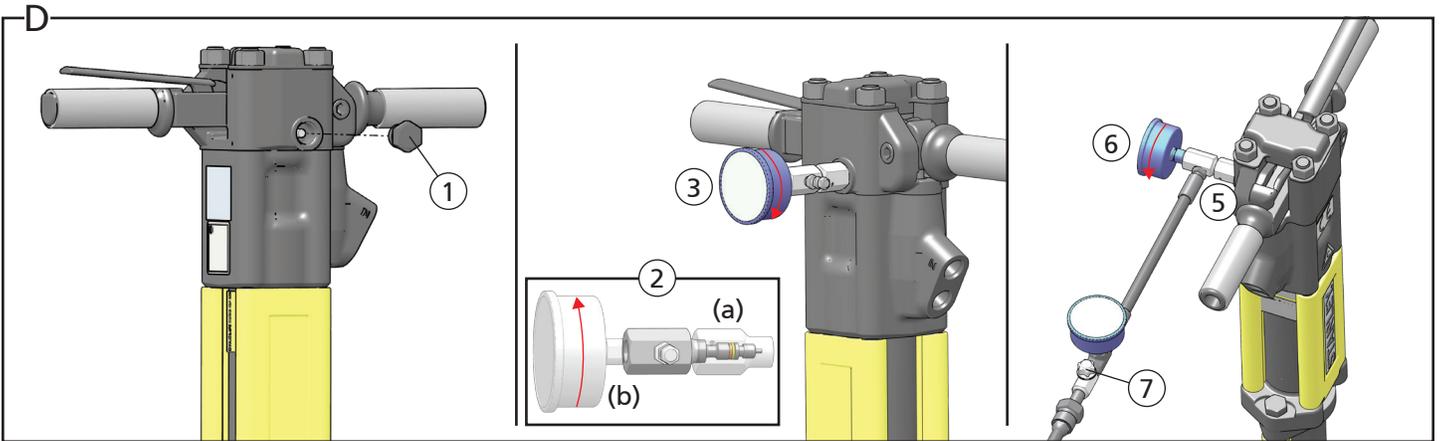
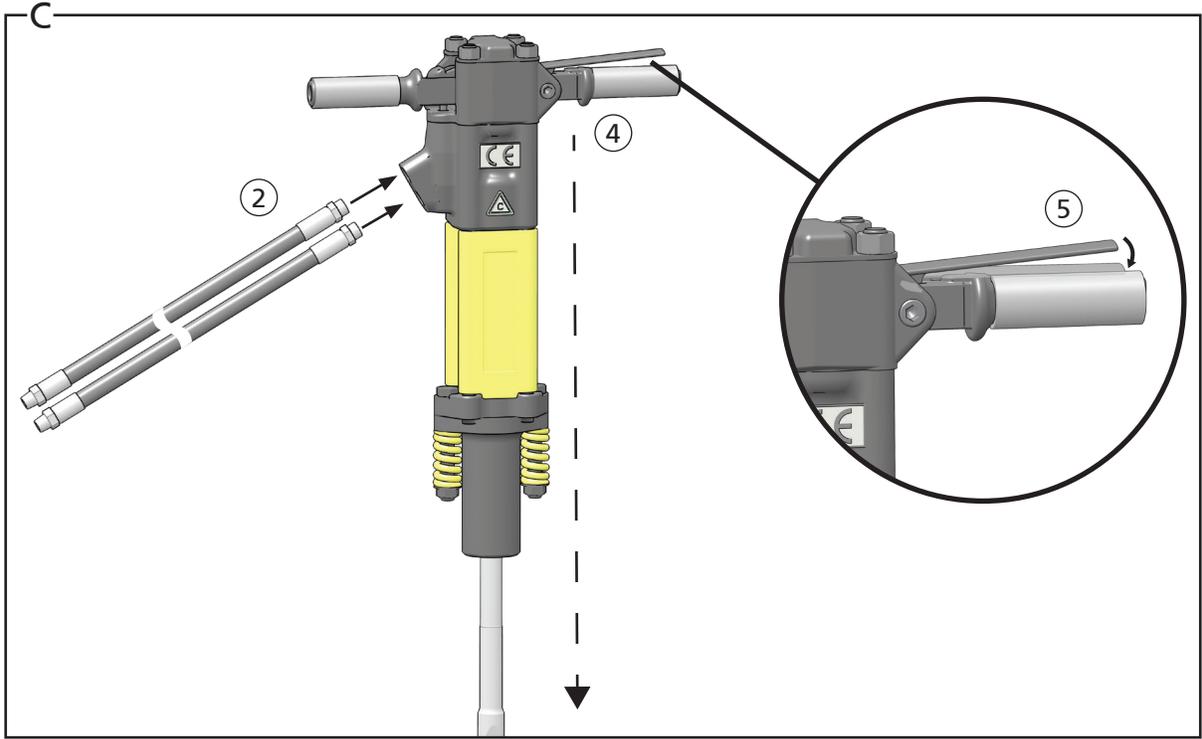


TT46 Hydraulic Tie Tamper

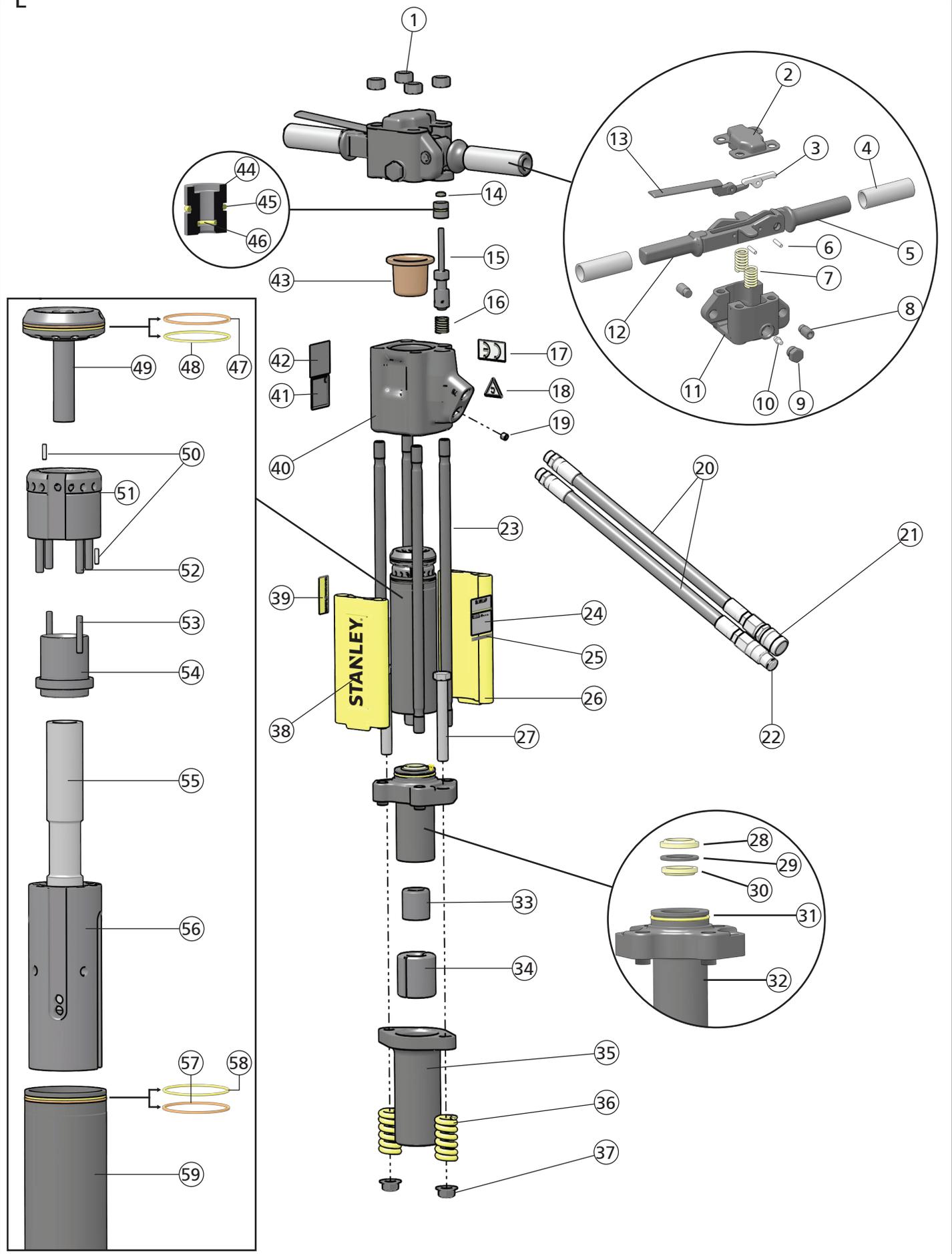
60685 User Manual 4/2024 Ver. 23

DECLARATION OF CONFORMITY ÜBEREINSTIMMUNGS-ERKLÄRUNG DECLARATION DE CONFORMITE CEE DECLARACION DE CONFORMIDAD DICHIARAZIONE DI CONFORMITA		STANLEY. CE
I, the undersigned: Ich, der Unterzeichnende: Je soussigné: El abajo firmante: Io sottoscritto:	Nuerenberg, David	
hereby declare that the equipment specified hereunder: bestätige hiermit, daß erklären Produkt genannten Werk oder Gerät: déclare que l'équipement visé ci-dessous: Por la presente declaro que el equipo se especifica a continuación: Dichiaro che le apparecchiature specificate di seguito:		
1. Category: Kategorie: Catégorie: Categoria: Categoria:	Tie Tamper, Hydraulic	
2. Make/Marke/Marque/Marca/Marca	Stanley	
3. Type/Typ/Type/Tipo/Tipo:	TT46133	
4. Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura:	All	
Has been manufactured in conformity with Wurde hergestellt in Übereinstimmung mit Est fabriqué conformément Ha sido fabricado de acuerdo con E' stata costruita in conformità con		
Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme	No. Nr Numéro No n.	Approved body Prüfung durch Organisme agréé Aprobado Collaudato
EN ISO Machinery Directive EN ISO EN ISO EN ISO	28927-10 2006/42/EC 3744 (15744) 11148-4, Cl. 5.5 13732-1	Self Self Self Self Self
5. Special Provisions: Spezielle Bestimmungen: Dispositions particulières: Provisiones especiales: Disposizioni speciali:	None	Sound Power Level: 108.9 dBA Vibration Level: 7.7 m/s ²
6. Representative in the Union: Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione	Patrick Vervier, Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.	
Done at/Ort/Fait à/Dado en/Fatto a Stanley, Milwaukie, Oregon USA		Date/Datum/le/Fecha/Data 4-23-2018
Signature/Unterschrift/Signature/Firma/Firma		
Position/Position/Fonction/Cargo/Posizione		North America Quality Manager





E



TT46 Parts Illustration - Detail E		
ITEM	P/N	DESCRIPTION
1	04374	Locknut
2	28494	Top Plate
3	20511	Lever
4	02494	Handle Grip
5	28369	Handle
6	20500	Spirol Pin
7	20498	Spring
8	20508	Pivot Screw
9	07493	Charge Plug
10	20499	Charge Valve
11	20505	Handle Pivot
12	58529	Trigger Handle
13	20502	Trigger
14	04056	Rod Wiper*
15	20515	Valve Spool
16	04058	Valve Spring
17	28323	CE Decal (TT46133)
18	11206	Circuit Type "C" Decal (TT46133)
19	12832	Orifice Plug (TT46133, TT46133B, TT46133C, TT46133UP)
20	56725	Parker Hose Assembly
	66727	Aeroquip Hose Assembly (TT46133B)
21	03972	Parker Female Coupler
	81158	Stucchi Female Coupler
22	03973	Parker Male Coupler
	81159	Stucchi Male Coupler
23	20517	Side Rod
24	74679	Name Tag
	74680	Name Tag (TT46233)
25	88344	Importer Tag (TT46133)
26	72919	Snap-on Filler
27	25304	Cap Screw
28	04386	Cup Seal*
29	04780	Washer
30	04387	Rod Wiper*
31	02022	O-Ring*
32	31955	Lower Body
	65046	Lower Body (TT46233)
33	15400	Hex Bushing
34	38008	Bit Guide Pair (Round) - used with 59033
	32249	Bit Guide Pair (Hex) - used with 44937
35	32258	Bit Keeper
36	12148	Spring
37	12307	Nut
38	74832	STANLEY Logo
39	73680	Railroad Help Desk Decal
40	11588	Accumulator Valve Block
41	88358	Sound Power Level Decal (TT46133)
42	88347	Composite Decal

TT46 Parts Illustration - Detail E		
ITEM	P/N	DESCRIPTION
43	07479	Accumulator Diaphragm
44	04057	Bushing
45	00293	O-Ring*
46	01362	O-Ring*
47	04381	Backup Ring*
48	04379	O-Ring*
49	04378	Porting Block
50	02900	Roll Pin
51	07480	Automatic Valve Body
	04380	Automatic Valve Body (TT46233)
52	04605	Push Pin
53	04571	Push Pin
54	04382	Automatic Valve
55	12833	Piston
	04385	Piston (TT46233)
56	07485	Flow Sleeve
	04384	Flow Sleeve (TT46233)
57	04381	Backup Ring*
58	04379	O-Ring*
59	04383	Flow Sleeve Tube
60	59033	Tamper Bit (Round below collar) - used with 38008
	44937	Tamper Bit (Hex below collar) - used with 32249
SK	04595	Seal Kit (*In seal kit)

Safety Precautions

	The Safety Alert Symbol alerts you to potential personal injury hazards. Obey all safety messages that follow to avoid possible injury or death.
	Indicates an imminently hazardous situation which will result in death or serious injury.
	Indicates a potentially hazardous situation which could result in death or serious injury
	Indicates a potentially hazardous situation which could result in property damage.

Always observe safety symbols. They are included for your safety and for the protection of the tool.



WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in tool damage and/or serious injury.

WARNING: To reduce the risk of injury, read the instruction manual.

General

- Do not discard safety instructions. Give to the operator.
- This tool will provide dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.
- Inspect the tool before each use and ensure all decals are legible. Contact STANLEY if replacements are needed.
- Establish a training program for all operators to ensure safe operation. Do not operate the tool unless thoroughly trained or under the supervision of an instructor. Keep out of the reach of children.
- Operators and maintenance personnel shall be able to physically handle the bulk, weight and power of the tool.
- Avoid unsuitable postures as these positions do not allow for counteracting of normal or unexpected movement of the tool, such as a sudden break of the tool bit. Change postures during extended tasks to help avoid discomfort or fatigue.
- Never use the tool unless the inserted tool is retained with a proper retainer.
- Do not operate a damaged, improperly adjusted, modified or incompletely assembled tool.
- Use and maintain the tool as stated in this manual. Misuse of the tool can cause serious injury. Do not modify the tool in any way.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Provide adequate ventilation in closed areas when operating a gas or diesel hydraulic power source.
- Do not inspect, carry, clean, change accessories or perform maintenance on the tool while the power source is connected. Accidental engagement of the tool can cause serious injury.
- Ensure work piece is securely fixed. Be aware that failure of the work piece or accessories may generate high velocity projectiles.
- Never use the tool bit as a hand struck tool.
- Stay alert, watch what you are doing and use common sense when operating a hydraulic tool. Do not operate this tool if you are tired or under the influence of drugs or alcohol. A moment of inattention while operating hydraulic tools may result in serious injury.
- During operation, do not contact mechanisms, accessories or hardware as they can become very hot or sharp; use your Personal Protection Equipment (PPE).
- Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations.
- Never operate the tool if you are unsure about the presence of underground utilities, such as electrical cables, gas pipes, etc. These can cause a hazard if damaged with the tool.
- The tool is not insulated against coming into contact with electric power. Use hose certified as non-conductive.
- Do not overreach. Maintain proper footing and balance at all times when using the tool.

- Slips, trips and falls are major causes of workplace injury. Be observant of hoses or oil surfaces lying about the work area, as they can be a tripping hazard.
- Operators must start in a work area without bystanders and must assess the risks to bystanders.
- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Operators must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Only use clean hydraulic fluid, filling equipment and lubricants that have been recommended by STANLEY.
- Ensure tools are working properly and safely by performing preventative maintenance (PM) procedures.
- Repair and service of this tool must only be performed by an authorized and certified dealer.
- Do not force the tool to do the work of a larger tool. Use the correct tool for your application.
- Use only hoses and hose couplings that are rated for a minimum working pressure of 2500 PSI (172 BAR).
- In spite of the application of relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These risks are: repetitive strain injury due to incorrect posture and risk of pinching fingers when changing tool bit.

Dust and Fumes

- **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints,
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Protect yourself and those around you. Research and understand the materials you are grinding. Follow correct safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.

- When dust or fumes are created, control them at the point of emission. Direct tool exhaust to minimize disturbance of dust.
- Operate and maintain the tool as recommended in this manual to minimize dust.
- Use respiratory protection in accordance with employers instruction or as required by occupational health and safety regulations.
- Avoid prolonged contact with dust. Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.

PPE

- Always wear safety equipment such as impact resistant goggles, ear protection, head protection, breathing protection and safety shoes at all times when operating the tool.
- Hands may be exposed to hazards, impacts, cuts, abrasions and heat. Wear gloves.
- Wear a hardhat if performing overhead work.
- Use PPE that conforms to standards ANSI Z87.1 (Eye and Face Protection), ANSI Z89.1 (Head Protection), ANSI Z41.1 (Foot Protection) and ANSI S12.6 (S3.19) (Hearing Protection).
- Do not wear loose fitting clothing or jewelry when operating the tool.



M003
Wear Ear
Protection



M004
Wear Eye
Protection



M016
Wear a Mask

Sound

- Exposure to high noise levels can cause permanent, disabling hearing

loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.

- Use and maintain as recommended in the manual to prevent an unnecessary increase in noise levels.

Vibration

- When using a non-rotary percussive tool to perform work related activities, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool. Tell your employer and consult a physician.
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- Use and maintain as recommended in the manual to prevent an unnecessary increase in vibration.
- Check for vibration level before each service. If you feel a higher than normal vibration, contact your STANLEY dealer for repair.

Hydraulic

- **Warning:** Hydraulic fluid under pressure could cause skin injection injury. Do not check for leaks with your hands. If you are injured by hydraulic fluid, get medical attention immediately.
- Do not let hydraulic oil get on the skin. Hydraulic oil is hot. Wear Personal Protection Equipment (PPE) at all times.
- If exposed to hydraulic fluid, wash hands immediately.
- Do not exceed the maximum relief valve setting stated on the tool.
- Inspect and clean couplers before use, daily. Replace damaged couplers immediately.
- Hydraulic circuit control valve must be OFF before coupling or uncoupling tools. Failure to do so may damage the couplers and cause overheating of the hydraulic system.
- Ensure the couplers are properly connected and are tight.
- Do not operate the tool at fluid temperatures above 140°F (60°C). Higher temperatures can cause operator discomfort and damage to the tool.
- Do not exceed the rated flow and pressure as stated on the tool. Rapid failure of the internal seals may result.

What is the TT46 Hydraulic Tie Tamper?

TT46 is a hand held hydraulic tool used to compact railroad ties. TT46 requires an external hydraulic power supply capable of supplying 4-6 GPM or 7-10 GPM, depending on model.

Specifications	
Pressure	1500-2500 PSI (103-172 BAR)
Flow	4-6 GPM (15-23 LPM) (TT46133 Models) 7-10 GPM (26-38 LPM) (TT46233 Models)
Max. Pressure	2500 PSI (172 BAR)
Max. Relief Pressure	2200-2300 PSI (152-159 BAR)
Recommended Back Pressure	250 PSI (17 BAR) or less
Couplers	3/8 inch NPT flush face
Port Size	SAE -8 O-ring
Tool Weight	63 Lbs (29 Kg)
Tool Length	39 inches (99 cm)
Width (at handles)	18 inches (46 cm)
Max. Hydraulic Oil Temp.	140°F (60°C)
HTMA/EHTMA Category	Type 1, Category C

Sound & Vibration Declaration	
Measured A-Weighted sound power	108.9 dBA
Uncertainty	3.39 dBA
Measured A-Weighted Sound Pressure	100.9 dBA
Uncertainty	3.39 dBA
Values determined according to noise test code given in ISO 15744, 11203 and 3744. Test conducted by independent notified body to comply with 2000/14/EC:2005.	
TT46 Trigger Handle	
Measured Vibration Emission Value: 3-Axis	7.7 m/sec ²
Uncertainty	1.25 m/sec ²
TT46 Non-Trigger Handle	
Measured Vibration Emission Value: 3-Axis	7.4 m/sec ²
Uncertainty	1.25 m/sec ²

Parts of TT46 - Detail A

1	Trigger
2	Handles
3	CE Decal (CE Models)
4	Circuit Type "C" Decal (CE Models)
5	STANLEY Logo Decal
6	Tool Bit
7	Tool Name Tag
8	Accumulator Charging Port
9	Hydraulic Input and Output Ports
10	Bit Keeper
11	Railroad Help Desk Decal
12	Model & Serial Number
13	Sound Power Level Decal (CE Models)
14	Composite Safety Decal (CE Models)

Install Tool Bit - Detail B

⚠ WARNING

Do not install or change tool accessories while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury. Disconnect the hydraulic power source before installing or changing accessories.

1. Ensure the hydraulic power source is turned off and is disconnected from the tool.
2. Remove the cap screws holding the springs and bit keeper in place.
3. Remove the bit keeper and the bit guide.
4. Insert a tool bit into the bit keeper.
5. Attach the bit guide to the tool bit.
6. Insert the tool bit into the hex bushing. Match the bit hex pattern with the bushing hex pattern and ensure the bit slides into the hex bushing.
Note: Never use a blunt tool bit as they cause more vibration.
7. Reattach the bit keeper and springs.
Note: Never use TT46 unless the tool bit is locked in the retainer.

Tool Operation - Detail C

Note: Ensure hydraulic oil is at or above 50°F before using the tool. Preheat if necessary.

⚠ WARNING

TT46 will rise quickly when first turned on. Do not stand over or place any part of your body on top of the tamper. Wear safety shoes.

1. Ensure the hydraulic power source is turned off.
2. Wipe the hydraulic couplers clean and connect to the hydraulic power source.
3. Power up the hydraulic power source.
4. Wrap hands around the tool handles and place the tamper bit on the tie to be compacted, at a 90° angle. Apply down pressure.
Note: Maintain a balanced body position and secure footing while operating tool.
5. Slowly squeeze the trigger to start compacting. Squeeze harder for fast speed operation. Guide the tamper using both hands on the handles.
Note: Hold the tool correctly and be ready to counteract normal or sudden movements. Have both hands available.
6. Release the trigger to immediately stop the tool.
Note: If you encounter a breakdown or the tool stops for any reason, release the trigger and power down the hydraulic power source.

Tool Maintenance

Use only accessories, consumables and parts recommended by STANLEY.

Daily Maintenance

1. Remove hydraulic power from the tool and check all hydraulic connections and hoses for damage. Replace damaged parts before operating the tool.
2. Check the flow and pressure of the hydraulic power source using a calibrated flow meter. Proper flow and pressure maintain proper tool speed. If tool speed increases or decreases, stop using the tool and ensure proper flow and pressure.
3. Inspect the tool bit retaining parts. Replace when they have become worn, cracked or distorted.
4. Inspect tool to ensure all stickers are legible. Contact STANLEY if replacements are needed.

Accumulator Charge - Detail D

Check accumulator charge every 6 months or if poor performance develops.

Required Tools:

- STANLEY Accumulator Charge Kit (P/N 31254)
- Nitrogen Bottle

Check

1. Remove the charging plug from the TT46 handle.
2. (a) Hold the chuck end of the tester and (b) twist the gauge counter-

clockwise. This will retract the valve stem.

- Screw the tester onto the breaker charging port. Twist the tester gauge clockwise and read the pressure indicated on the gauge. Charge should be 500-600 PSI (34-41 BAR).

Charge

- Retract the tester valve stem.
- Connect the charging assembly hose to the tester.
- Twist the tester gauge clockwise to advance the valve stem.
- Slowly open the snub valve and charge to 600-700 PSI (41-48 BAR).
- Close the snub valve, retract the tester valve stem and remove the tester from the breaker charging port. Replace the charging plug.

Tool Storage

Clean the tool and store in a clean, dry space that is safe from damage. Ensure the tool is secured and will not move during transport. An unsecured tool could cause injury or damage to the tool.

Tool Disposal

Hydraulic Oil

Hydraulic oil can contaminate the air, ground and water if not properly recycled. Recycle hydraulic oil in accordance with all State, Federal and local laws, at your local oil recycling facility.

Hydraulic Hoses

Hang hydraulic hoses to drain. Collect the oil for recycling. Contact your local municipal recycling authorities for an approved hydraulic hose recycling site.

Tool Body

Drain hydraulic oil from the tool, making sure to collect the oil for recycling. Discharge the accumulator, disassemble the tool and dispose of all non-metal parts. Recycle the metal components. Contact your local municipal recycling authorities for recycling instructions.

Troubleshooting

Problem	Possible Cause	Solution
Tool does not run or runs improperly.	The hydraulic power source is not running or not running properly.	Ensure the power source is delivering proper flow and pressure. See "Specifications" on page 8. Proper flow and pressure maintain proper tool speed. Check regularly.
	Couplers or hoses are blocked.	Turn off and disconnect the tool from the hydraulic power source. Inspect and ensure no blockage exists.
	Low accumulator charge pressure.	Check accumulator charge. Recharge if necessary. See "Accumulator Charge - Detail D" on page 8.
	Hydraulic oil is above the max. operating temperature of 140°F (60°C).	Provide an oil cooler to maintain proper oil temperature.
	High Back Pressure.	Check the hydraulic system for excessive back pressure.
	Mechanical failure.	Contact your STANLEY dealer for service.

Accessories	
4 inch steel with "V" cut (18 inch overall length)	44979
4 inch steel with "V" cut, Heavy Duty (18 inch overall length)	59034
4 inch steel with "V" cut (21 inch overall length)	44937
4 inch steel with "V" cut, Heavy Duty (21 inch overall length)	59033
4 inch steel (24 inch overall length)	33200
Anti-Vibration Handle Conversion Kit	27680
Service Tools	
Tamping sleeve tool	01120
O-ring tool kit	04337
Seal kit	04595
Flow sleeve removal tube	04910
Flow sleeve removal tool	04919
Accumulator cylinder puller	05640
Accumulator tester	02835
Accumulator charge kit	31254
Charging assembly	15304
Flow and pressure tester	04182



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