

STANLEY®

TJ12 HYDRAULIC TRACK JACK (10 TON)



USER'S MANUAL SAFETY, OPERATION AND MAINTENANCE



European Union
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B-1048 Bruxelles/Brussel
Belgique/België

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New Britain, CT 06053
U.S.A.
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IMPORTANT

To fill out a Product Warranty Validation form, and for information on your warranty, visit Stanleyhydraulics.com and select the Company tab, Warranty.
(NOTE: The warranty Validation record must be submitted to validate the warranty).

SERVICING: This manual contains safety, and operation instructions. Stanley Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

DANGER

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY
ÜBEREINSTIMMUNGS-ERKLÄRUNG
DECLARATION DE CONFORMITE CEE
DECLARACION DE CONFORMIDAD
DICHIARAZIONE DI CONFORMITA



I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
Io sottoscritto:

Nuerenberg, David

Surname and First names/Familiennamen und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

hereby declare that the equipment specified hereunder:
bestätige hiermit, daß erklaren 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: **Track Jack**
Kategorie:
Catégorie:
Categoria:
Categoria:

2. Make/Marke/Marque/Marca/Marca **Stanley**

3. Type/Typ/Type/Tipo/Tipo: **TJ12**

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
Machinery Directive EN ISO EN	2006/42/EC:2006 12100:2010 1494:2000+A1:2008	Self Self Self (Test Report Ref # 12142016TJ12) 2/14/2017 Ver-1)

5. Special Provisions: **None**

Spezielle Bestimmungen:
Dispositions particulières:
Provisiones especiales:
Disposizioni speciali:

6. Representative in the Union: **Patrick Vervier, Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.**
Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione North American Quality Manager

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage or damage to the equipment.



This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

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

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with and work in accordance with the safety precautions and instructions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided.



GENERAL SAFETY PRECAUTIONS

- The TJ12 conforms with EN 1494:2000+A1:2008. This jack is intended for only the lifting of rail (railroad tracks) and should never be used for any other purpose other than what it was intended for or personal injury could result.
- The user must be familiar with correct operation, maintenance, and use of the jack. Lack of knowledge can lead to personal injury.
- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes, dangerous terrain conditions and extreme climates.
- Always wear safety equipment such as goggles, gloves, head, and safety shoes at all times when operating the tool.
- Warning: Hydraulic fluid under pressure could cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.
- The total load lifted or supported by the jack must never exceed the rated capacity. Excess pressure can result in personal injury. Use a jack with sufficient capacity to lift a load. Keep clear of lifted loads.
- Before each use visually inspect the jack to prevent unsafe conditions from developing. Do not use jacks that are damaged, leaking, altered or in poor condition. See **“INSPECTING THE TRACK JACK FOR DAMAGE OR LEAKAGE”** on page # 10 for additional information.
- Properly support the jack.
- Do not put poorly balanced or off-center loads on the jack pad or jack. The load can tip and cause personal injury. Do not use in unstable or hazardous positions.
- The jack must be used on flat surfaces to be able to carry the load correctly. The base must be completely supported. Do not push or lift on the ends of the base.
- Do not lift people, or loads with people on them.
- As the load is lifted, use blocks or cribs to guard against a falling load.
- To prevent personal injury, do not allow personnel to go under, or work under or on a load before it is properly secured by suitable means. All personnel must be clear of a load before lowering or lifting.
- Lift only dead weight loads. Do not add additional weight to a lifted load.
- Do not use jacks that are damaged, altered or in poor condition. Do not modify the jack in any way that would affect the compliance of the jack with standard BS EN 1494:2000+A1:2008.

SAFETY PRECAUTIONS

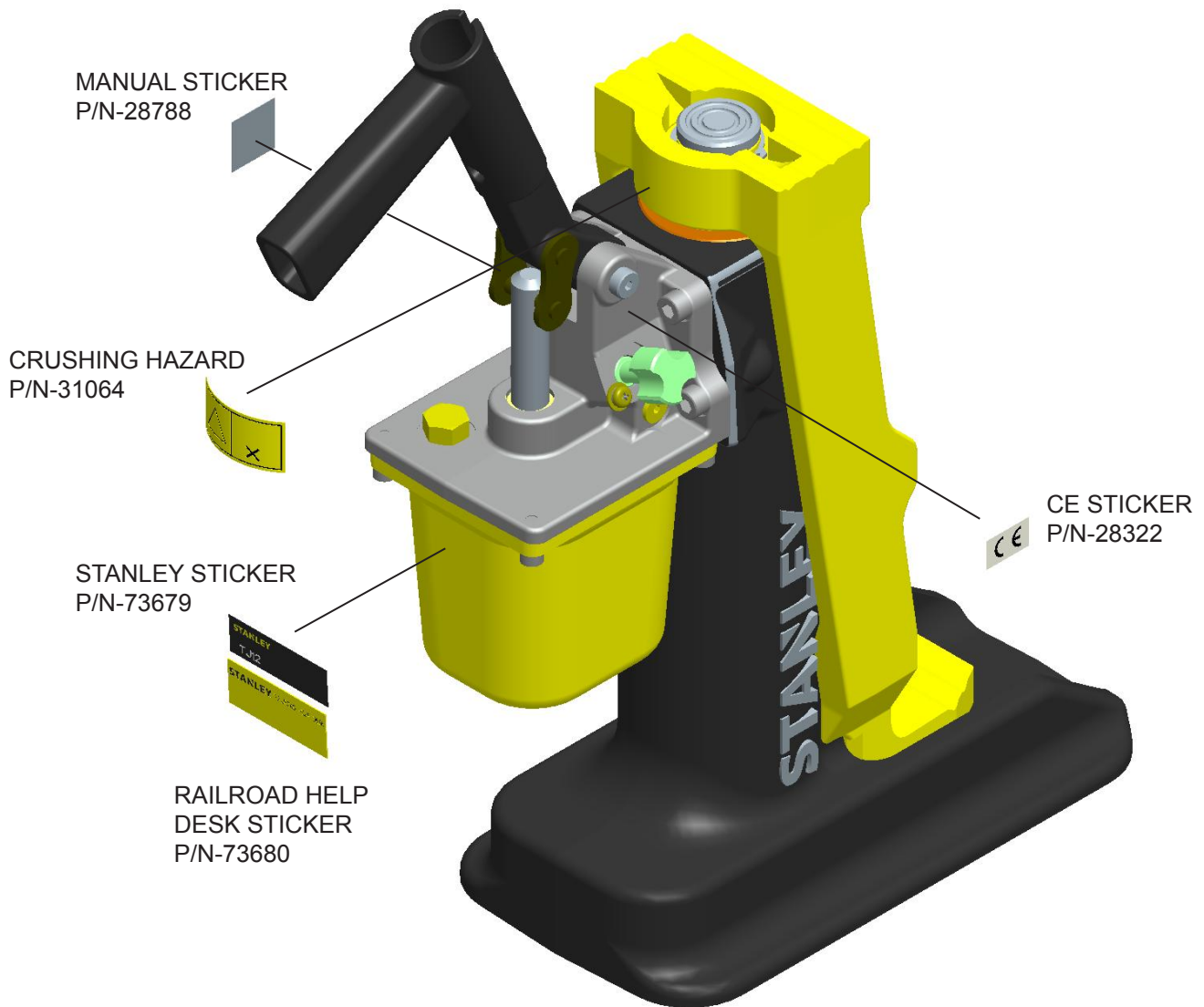
GENERAL SAFETY PRECAUTIONS CONTINUED:

- The reservoir must have sufficient hydraulic fluid to fully stroke the jack. Use only approved hydraulic fluids. Also make sure that there is no contaminations of oil on the floor or working area
- Read and understand the operating instructions in this manual, and the ASME B30.1 and EN 1494 safety code for jacks.
- Users must ensure that all safety related decals and stickers are whole and readable. Replace those which become unreadable.
- Never use extreme heat to disassemble a hydraulic ram or cylinder. Metal fatigue can lead to unsafe conditions.
- Be aware of possible "pinch points" of the jack, and stay clear to avoid personal injury.
- When lifting with the edge of the lifting toe, place a wedge between the load and the top of the lifting toe to avoid bending the cylinder column.
- Carry the jack only by the carrying handle. Make sure the jack is in the fully lowered position.
- End users must be trained in the proper use of the jack. If you finished your work put the jack into the fully lowered position.
- Remove operating levers when not in use to avoid accidental dislocation of the jack, and reduce the tripping hazard.
- Make sure all personnel are clear of the load before lifting or lowering.
- DO NOT use extenders, spindles or accessories, injury or death could result.
- Never use this tool when working around electrified rail unless it is de-energized or you have been properly trained to work on electrified rail. If you are not sure the rail is live or not, you must treat it as being live and dangerous to life.
- The operator should always have the lifting device and load in view during movement.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Never use the tool in an explosive atmosphere, sparks could ignite explosive gas.
- Never use the tool near strong magnetic fields.
- Do not handling the load, the nature of which could lead to dangerous situation e.g. molten metal, acids, radiating material or especially brittle loads.
- When decommissioning the jack drain all hydraulic fluid and dispose of the fluid in accordance with state and federal regulations.
- If the rated values are exceeded, use additional persons to aid in lowering.

TOOL STICKERS AND TAGS

NOTE: The following information can be found on the bottom left side of the base.

Model Number, Serial Number, 7250 PSI/500 Bar and year of manufacture are stamped in this location on each jack.



MAINTENANCE & CARE

GENERAL PROTECTION

Store the Track Jack in an upright position, in a place where it is protected from the elements, abrasive dust, and damage.

Use only recommended repair and replacement parts and materials specified in the Parts List section of this manual.

Do not use the jack for applications it was not designed for.

Use the carrying handle to transport the Track Jack from location to location. **Do not** carry the Track Jack by inserting the jack handle in the socket.

CLEANING

Establish a routine to keep the jack as free from dirt as possible – daily, or at each shift change, for example.

Jacks exposed to rain, sand, or grit-laden air should be cleaned prior to each use.

Exposed screw threads should be cleaned and re-lubricated as necessary.

Keep the cylinder clean at all times. Keep the piston retracted when not in use.

Operating lever and load-bearing surfaces should be free of slippery material or fluids.

Keep tool labels and stickers legible.

HYDRAULIC FLUID

The Track Jack holds approximately 28 ounces/820 cc cubic inches of hydraulic fluid (ISO#15) in its reservoir.

⚠ DANGER

DO NOT USE BRAKE FLUID OR OTHER NON-APPROVED SUBSTITUTE FLUIDS. LIGHTER WEIGHT FLUIDS MAY CAUSE THE JACK TO FAIL UNDER LOAD.

ADDING HYDRAULIC FLUID

A jack that is low on hydraulic fluid will still be able to lift a full load, but not to the full lift height. As the reservoir begins to run dry, the handle lever becomes very easy to pump, and the jack stops lifting, this is a sign the jack is low on fluid.

To add oil:

1. Fully retract the plunger.
2. Make sure relief valve is closed.
3. Remove the fill plug (item # 3 on the Pump Assy Illustration).
4. Fill the reservoir with new, clean fluid (use ISO#15 Hydraulic Fluid) fill completely to the bottom of the threads on the fill plug hole.

⚠ WARNING

Do not overfill or underfill the reservoir as this may damage the jack.

ANNUAL FLUID CHANGE

Regardless of usage, the Track Jack hydraulic fluid should be changed annually to ensure proper operation of the jack. To drain the fluid:

1. Thoroughly clean the area around the fill plug.
2. Remove the fill plug and lay the Track Jack on its back to allow the fluid to drain from the fill hole into an appropriate receptacle.
3. Dispose of the used hydraulic fluid in accordance with Environmental Protection Agency regulations.
4. Make sure dirt or other contaminants do not enter the reservoir while the fill plug is removed. When drained, check the fluid for contaminants. If the fluid appears gritty or dirty, flush the reservoir with clean hydraulic fluid before refilling.
5. Refill the reservoir with the recommended hydraulic fluid. Stand the jack upright, and with the piston fully retracted, fill the reservoir completely to the bottom of the threads on the fill plug hole.
6. Before returning the jack to service, fully extend the piston without a load by pumping the pump handle without the long extension handle. If the fluid level is correct, the pump handle will become almost impossible to pump by hand as the piston reaches full extension. Replace the plug.

MAINTENANCE & CARE

7. It may be necessary to bleed air out of the cylinder. See instructions below for purging air.
8. Inspect the jack for leaks, cracks, or other damage.

⚠ DANGER

Immediately take out of service any jack that appears to be damaged or leaking.

PURGING AIR

Air trapped within the jack hydraulic system can be removed by performing the following steps.

1. Make sure the plunger is fully retracted.
2. Pry out the cap (see illustration at right).
3. Loosen (**Do Not Remove**) the capscrew under the cap located in the top of the plunger.
4. Place the jack in a suitable fixture to prevent the extension of the plunger while purging air.

⚠ DANGER

The fixture used to prevent extension of the plunger while purging air must be able to withstand the full ten ton force of the jack.

5. Add hydraulic fluid to the reservoir if necessary. See instructions on page 8 for adding fluid.
6. Pump the handle until oil comes up through the thread area of the capscrew in the plunger.
7. Tighten the socket head capscrew to 10-12 ft. lbs./14-16 Nm. Then replace the cap.
8. Top off the reservoir with hydraulic fluid. NOTE: Make sure the plunger is fully retracted before filling the reservoir.

For Purging Remove Cap And Loosen but do not remove the socket head capscrew that is under the cap.



PRESSURE RELIEF SETTING

The pressure relief is pre-set at the factory and should never be altered. After the pressure relief is set at the factory the adjustment screw is made to not be tampered with.

If you have any issues with the relief setting, please contact Stanley Hydraulic Tools and ask for a customer service representative.

⚠ WARNING

The pressure relief is pre-set at the factory, never attempt to alter it's setting. Altering the relief setting could result in death, serious injury or equipment damage.

⚠ WARNING

To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

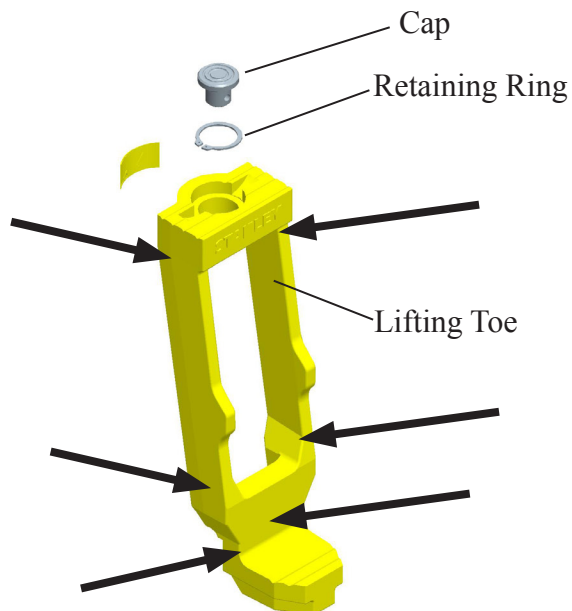
MAINTENANCE & CARE

INSPECTING THE TRACK JACK FOR DAMAGE OR LEAKAGE

1. Before each use visually inspect the jack for leaks, cracks, or other damage.

⚠ DANGER

Never use a damaged track jack, immediately take out of service any jack that appears to be damaged or leaking and replace any damaged parts.



2. Once a month it is recommended to remove the "Retaining Ring" and "Lifting Toe", thoroughly inspect the back as well as the front and sides for damage or cracks. Take special note of the areas indicated above with the black arrows.

OPERATING INSTRUCTIONS

⚠ DANGER

MAKE SURE THAT ALL PERSONNEL ARE CLEAR OF THE LOAD BEFORE ATTEMPTING TO RAISE OR LOWER THE JACK. SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER USE OF THIS TOOL.

PREOPERATION PROCEDURES

Before putting a new Track Jack into initial service, or after an extended period of being unused, perform a visual inspection for bent, broken, cracked, missing or worn components. (see “**INSPECTING THE TRACK JACK FOR DAMAGE OR LEAKAGE**”) on page # 10 for more information. Ensure the hydraulic fluid and lubricant level is correct. Fully extend and retract the jack without a load to ensure that the jack is primed and operating properly.

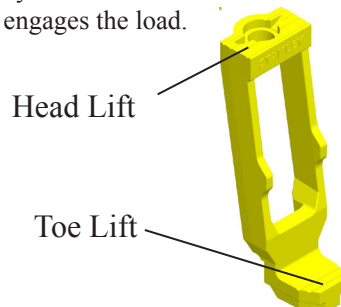
RAISING A LOAD

1. Before using the Track Jack, make sure that it is set on a firm surface capable of bearing the intended load.
2. Make sure the Spindle (item 41) is closed, by turning it clockwise until it is hand tight.

⚠ DANGER

Overtightening the spindle (item 41) can damage the valve seat. **DO NOT** use pliers or wrenches to tighten.

3. Pump the handle by hand until the Toe Lift or Head Lift plate rises to and engages the load.



⚠ DANGER

Make certain that the lifting toe is fully engaged on the load, and the entire jack is stable, before proceeding further.

4. Insert the jack handle fully into the handle socket and pump until the desired lift has been obtained.

⚠ WARNING

Use only the recommended length jack handle. **DO NOT** use longer handles or extenders. See Spec's on page 13.

5. Remove the jack handle from the handle socket once the load reaches its desired height.
6. Crib or block the load to prevent accidentally dropping of the load.

LOWERING A LOAD

1. Make sure all personnel are clear of the load.
2. Remove cribbing or blocking if used.
3. Open the Spindle (item 41) by turning it counter-clockwise (**open slowly**).

⚠ DANGER

Lowering speed is controlled by opening the Spindle more or less. **Open slowly to control the lowering speed. Caution: Opening the Spindle too much will cause the load to drop quickly.**

4. When the load reaches the desired level, close the Spindle by turning it clockwise until it is hand tight.


HORIZONTAL OPERATION

The Track Jack can also be used horizontally to separate two items, as long as it is placed with the handle socket facing upwards.

1. Place the Track Jack base against the largest, heaviest, or otherwise least moveable of the two items.
2. Close the Spindle (item 41) by turning it clockwise until hand tight.
3. Pump the handle socket by hand until the lifting toe or the head of the lifting toe firmly engages the more moveable of the two items.

TROUBLESHOOTING

4. Make sure personnel are clear of all items being jacked before attempting to move anything.
5. Insert the jack handle into the handle socket and pump until the desired separation has been obtained.
6. Remove the jack handle from the socket once the moveable load reaches its desired separation.
7. To free the jack, open the Spindle by turning it counterclockwise. When the lift plate is clear, close the Spindle.
8. It is necessary that the operator can watch the lifting device and the load during all movements


WARNING

NEVER LIFT OR LOWER A LOAD HEAVIER THAN THE LOAD RATING OF THE JACK. DAMAGE TO THE JACK OR LOAD COULD RESULT FROM IMPROPER USE OF THIS TOOL.

PUMPING HANDLE

A pumping handle is included with the Track Jack. DO NOT use the pumping handle for any other purpose. DO NOT substitute other material for use as a pumping handle or use a longer handle than what is specified on page 13 under specifications.

TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

Because the Track Jack can be used for many different applications, this information is general in nature and does not address specific uses.

PROBLEM	CAUSE	CORRECTION
Jack will not raise	A) Release valve not closed B) Release valve ball not seating properly C) Seal failure	Close the valve Have jack serviced by a qualified technician Have jack serviced by a qualified technician
Jack raises but will not hold	Release valve ball not seating properly Relief valve set too low or Malfunctioning Seal failure	Have jack serviced by a qualified technician Have jack serviced by a qualified technician
Jack only raises part way	Hydraulic fluid level is low	Add hydraulic fluid (See spec page)
Jack leaks hydraulic fluid	Seal failure	Have jack serviced by a qualified technician
Jack retracts slowly	Air in the hydraulic system	Purge air from the hydraulic system
Jack raises, but pulses and hesitates	Air in the hydraulic system	Purge air from the hydraulic system

SPECIFICATIONS

SPECIFICATIONS

Performance

Maximum Lift	8.8 in. / 22.3 cm
Maximum Load	10 tons / 9,072 kg
Pump Displacement	46 cu. in. / 7.5 cc stroke, single speed
Advance rate per stroke	0.160 in. / 4.0 mm
Pressure at rated load	7250 psi / 500 bar Model TJ12
Maximum pump handle effort	75 lbs. / 34 kg

Dimensions

Baseplate Size TJ12111S	6.000 x 11 in. / 15 x 28 cm
Baseplate Size TJ12112S Narrow	4.500 x 11 in. / 11.4 x 28 cm

Weight 45 lbs / 19.5 kg

Lift Toe Width and Depth 2-1/2 in x 3 in. / 63 mm x 76 mm
Height (Retracted) 14.7 in. / 37.3 cm

Height (Extended) 23.500 in. / 597 mm
Net Weight (with oil) no handle 45 lb / 20.4 kg

Pump Handle Length (p/n-52813) 36 in. / 91 cm

Hydraulic Requirements

Reservoir Capacity 28 oz / 828 cc
Recommended Fluid ISO #15 Hydraulic Fluid.

Standards ASME B30.1, EN 1494:2009

Note This product does not exceed 70 dBA per ISO 11201

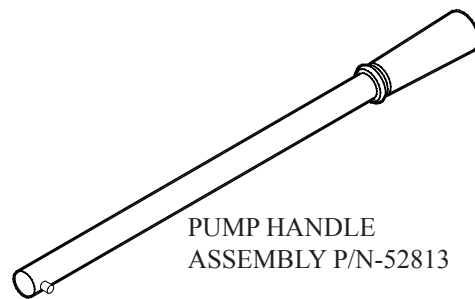
NOTE: Weights, dimensions and operating specifications listed on this sheet are subject to change without notice. Where specifications are critical to your application, please consult the factory.

REPAIR KITS

NOTE: For items in repair kits see both illustrations and parts lists.

Cylinder Repair Kit P/N-56522
Includes Items: 1, 8, 19, 21, 26 thru 30.

Reservoir Repair Kit P/N- 56524
Includes Items: 24, 25 and 37

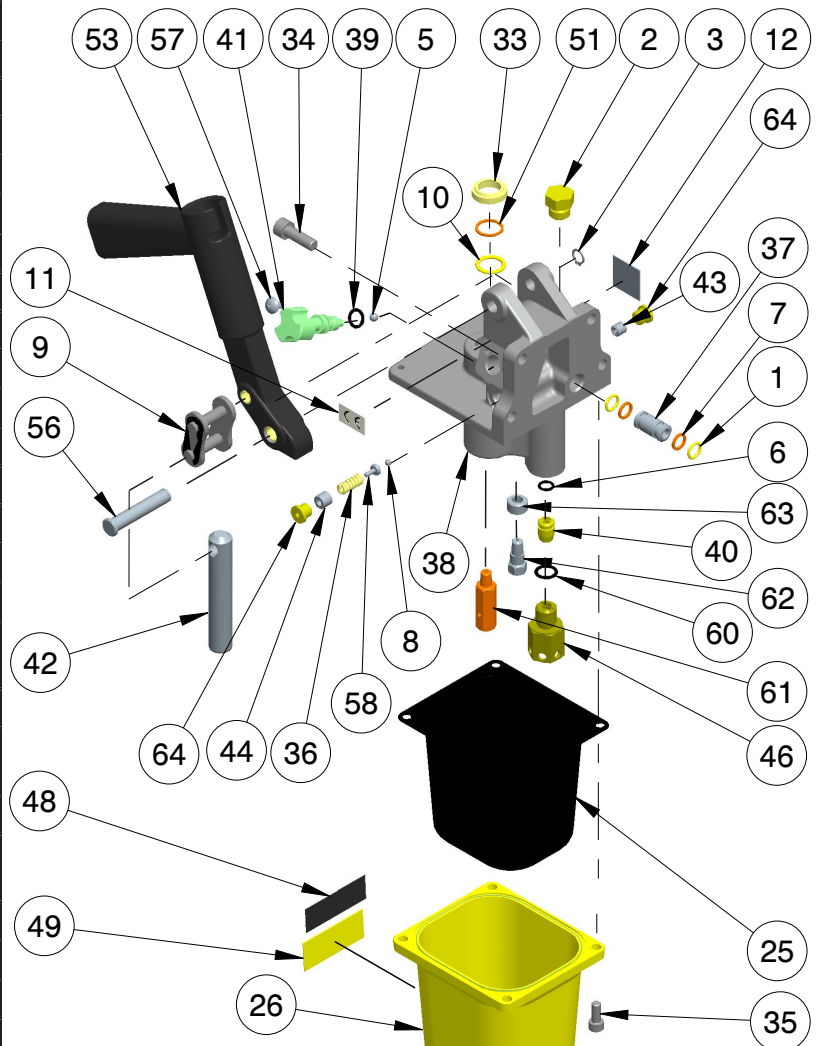


PUMP HANDLE
ASSEMBLY P/N-52813

PUMP ASSY ILLUSTRATION & PARTS LIST

For Cylinder Repair Kit & Reservoir
Repair kit see page 13.

ITEM	PART #	QTY	DESCRIPTION
1	00055	2	O-RING
2	01671	1	-6 HEX HD SAE PLUG
3	04855	1	RETAINING RING EXTERNAL
5	05291	1	STEEL BALL 7/32
6	07327	1	O-RING
7	15398	2	BACK-UP RING
8	21338	1	STEEL BALL 5/32
9	26005	1	# 80 MASTER LINK
10	26039	1	O-RING
11	28323	1	STICKER "CE" 12MM
12	28788	1	STICKER - MANUAL
25	52831	1	BLADDER
26	52832	1	RESERVOIR
33	56517	1	ROD WIPER
34	56518	4	CAPSCREW
35	56521	4	CAPSCREW
36	71431	1	COMPRESSION COIL SPRING
37	71478	1	OIL TUBE
38	74863	1	PUMP BODY (INCLUDES EXPANDER PLUGS)
39	71707	1	O-RING
40	72663	1	CHECK VALVE SEAT ASSY (INCLUDES ITEM 6)
41	71715	1	SPINDLE
42	71716	1	PISTON
43	76751	1	RELIEF VALVE SEAT-COINED
44	71738	1	SELF LOCKING SETSCREW
46	72664	1	CHECK VALVE HOUSING ASSY (INCLUDES ITEM 60)
48	73679	1	NAME TAG - TJ12
49	73680	1	RR HELP DESK STICKER
51	76494	1	BACK-UP RING
53	76697	1	HANDLE (INCLUDES DU BUSHINGS)
56	76716	1	GROOVED CLEVIS PIN
57	76717	1	SCREW
58	76718	1	SPRING SEAT
60	76773	1	O-RING
61	76817	1	RELIEF VALVE ASSEMBLY (RELIEF IS PRE SET AT FACTORY)
62	79297	1	ORIFICE, TJ12 DESCENT
63	79301	1	SHIELD, ORIFICE
64	350023	2	HOLLOW HEX PLUG -3 SAE



Complete Pump Assembly P/N-74864

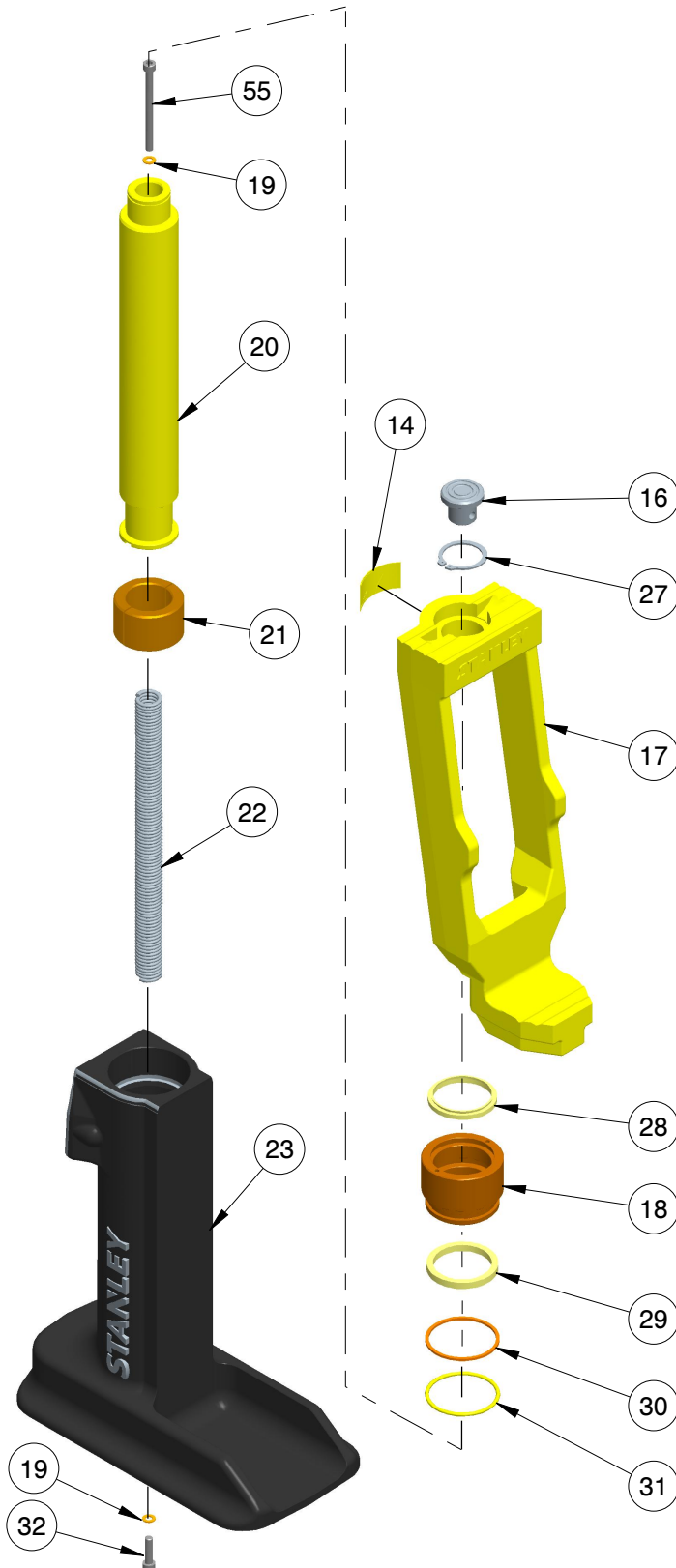
* DENOTES PART IN SEAL KIT (P/N-72735) (see both parts list for items included in seal kit)

Model #, Serial # Located here.

TJ12111S
TJ12112S Narrow Base

BASE ILLUSTRATION & PARTS LIST

For Cylinder Repair Kit & Reservoir Repair kit see page 13.



ITEM	PART #	QTY	DESCRIPTION
14	31064	1	CRUSHING HAZARD DECAL
16	52805	1	CAP ASSY.
17	52806	1	LIFTING TOE
18	52807	1	STOP RING
19	52808	2	GASKET*
20	52809	1	PLUNGER
21	52810	1	BEARING
22	52811	1	SPRING ASSEMBLY
23	52812	1	BASE TJ12
27	56506	1	RETAINING RING*
28	56507	1	ROD WIPER *
29	56508	1	ROD SEAL*
30	56509	1	BACK-UP RING *
31	56510	1	O-RING *
32	56512	1	HSHCS M6-1.0 X 25
55	76714	1	HSHCS M6-1.0 X 80

* DENOTES PART IN SEAL KIT P/N-72735 (see both parts list for items included in seal kit)



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