



INSTRUCTIONS FOR USE

IMPORTANT

Read these instructions carefully in addition to the instructions for assembly, use, operation and maintenance and keep them in a safe place for any subsequent consultation. This transmission jack has been exclusively designed for use under elevated vehicles to service, remove, move or install a gearbox. Any other application beyond the conditions established will be considered inappropriate.

Handle the jack correctly and ensure that all parts and components are in good condition prior to its initial and subsequent uses and that no parts are missing. Otherwise, do not use the jack until the problem has been solved.

Operation, repair and maintenance of the jack should only be performed by authorized persons, having read carefully and understood the contents of this manual and the assembly instructions.

Do not modify the jack in any way or use non-original components which may damage the jack and invalidate the guarantee.

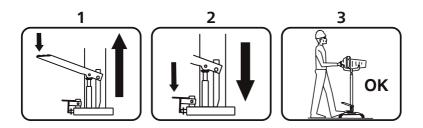
Non-compliance with these instructions may result in injury or damage to the user, the jack or gearbox or elements that are removed or installed. The manufacturer accepts no responsibility for the improper use of the transmission jack.

SAFETY INSTRUCTIONS

- 1 The weight of the element to be removed, moved or installed should never exceed the rated capacity of the jack.
- 2 The maximum stroke of the jack, indicated on the label, should never be exceeded.
- 3 The jack should be supported on a solid, level and horizontal surface to avoid any sinking. The work area should be well illuminated and free of unnecessary elements. Non authorized personnel should keep a safe distance from the jack during its operation.
- 4 The vehicle from which the gearbox is to be removed or another component is to be installed, should have the parking brake applied and should be lifted to a sufficient height to allow the jack to be introduced. Mechanical support stands shall be used or another appropriate method to ensure that the correct position cannot be moved. Stand outside the load perimeter. There should never be a person inside the vehicle.
- 5 Prior to proceeding with the lowering, installation or movement of the gearbox, it must be secured and centered on the lifting support.
- 6 Although the jack is not a transportation tool, it may be necessary to move the load, therefore the floor surface should not be slippery and should be free from obstacles so as to avoid overturning. With the load centered and secured, position the piston of the jack at its minimum height for transportation.
- 7 During lifting, lowering or transportation, all safety precautions should be taken to avoid displacement of the load. If the jack tilts or sways during the operation, maintain a safety distance and do not attempt to hold it steady.
- 8 The jack is a lifting device and should never be used to transport a load.
- 9 As a safety measure against overload, the jack is fitted with an overload valve, set at the factory. This valve should under no circumstances be tampered with.

USE AND OPERATION

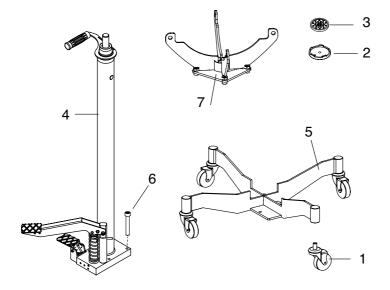
- 1 Having checked that no component is missing, position the hydraulic unit (4) over the base (5), securing it with the three screws (6) that are supplied and position the support stand (7) over the piston.
- Prior to using the jack, it is necessary to drain the hydraulic circuit to eliminate any air from the valve system.
 To simplify the operation, the help of another person is recommendable to apply pressure on the release pedal (figure 2, page 4). Simultaneously, hold the jack by the handle and proceed to apply pressure on the lifting pedal (figure 1, page 4). By releasing the release pedal the jack is ready for operation.
- ³ The jack is pumped up by applying pressure on the lifting pedal and lowered by applying pressure on the release pedal. Fix the position of the jack in relation to the gearbox or element to be removed so that when the piston is pumped out, the stand is centered. Prior to proceeding with the lowering, installation or movement of the gearbox, it is necessary to secure it on the lifting stand.
- 4 To avoid sudden lowering, the jack is fitted with a system which automatically regulates and controls the lowering operation (LCS).
- 5 Prior to each use, check for bent, broken, cracked or loose parts and withdraw the jack from service if it is suspected that the jack has been subjected to abnormal loads or has suffered any knocks.
- 6 When the jack is not in use, the piston should be carefully retracted to avoid corrosion.



MAINTENANCE

- 1 Both the maintenance and repair of this jack may only be carried out by a qualified and authorized personnel.
- 2 Clean and lubricate the moving parts of the jack at regular intervals. The whole jack should be kept clean and protected from aggressive conditions at all times.
- 3 If the oil level needs to be checked or refilled, proceed as follows: With the jack in a vertical position and piston fully retracted, remove the filler plug and drain the hydraulic oil into a container. Position the jack in a horizontal position; proceed to fill necessary volume of new oil indicated in the table. Then reinstall the filler plug. Important: An excess of oil over the volume required may affect the operation of the jack.
- 4 Only use hydraulic oil type HLP 32 Extremely important: Never use brake fluid.
- 5 Following a period of prolonged intensive use, it is recommendable to change the oil in order to extend the lifetime of the jack.
- 6 When the jack is not in use, the piston should be fully retracted to avoid corrosion. However, it is recommendable to apply an anti-corrosion product to the main piston and particularly to the pump. Store the device in a dry and clean place, out of reach for children.
- 7 At the end of the useful life of the jack, drain off the oil and hand it over to an authorized agent and dispose of the remaining parts in accordance with local regulations.





SPARE PARTS LIST K 21214/21215

| Pos. | Parts No. K21214 | Parts No. K21215 | Description |
|------|------------------|------------------|----------------|
| 1 | K 21220 | K 21204 | Wheel |
| | K 21217 | K 21217 | Lifting saddle |
| 3* | K 21208 | K 21208 | Rubber pad |
| 4 | K 21221 | K 21222 | Hydraulic unit |
| 5 | | | Base |
| 6 | | | Screw |
| 7 | | | Support stand |
| | 0,6 lit | 0,8 lit | Oil |

* Accessory



K 21214 | K 21215

www.kamasatools.com