0.5 TON HYDRAULIC TRANSMISSION JACK



Make sure read and fully understand the instruction manual before using this product

1. GENERAL DESCRIPTION

The user must ultimately make the decision regarding suitability of the product with professional's helping for any given task and assume the responsibility of safety for himself or herself and others in the work area.

Rated capacity	0.5 Ton
Min.Height:	1175 mm
Max.Height:	1985 mm
Net Weight	32 kg

2. WARNING

To avoid personal injury or property damage during system operation, read and follow all CAUTIONS, WARNINGS, and INSTRUCTIONS, included with or attached to each product. SUPPLIER CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY RESULTING FROM UNSAFE USE OF PRODUCT, LACK OF MAINTENANCE, OR INCORRECT PRODUCT AND SYSTEM APPLICATION.

- 2.1 The maximum load capacity is 0.5 ton. DO NOT exceed this rated capacity.
- 2.2 This jack is used as an aid in the removal and installation of a transmission or a differential as individual components. DO NOT use it for any other purpose it is not designed to perform.
- 2.3 DO NOT use this transmission jack as a vehicle lifting device or as a vehicle support.
- 2.4 Keep children and unauthorized persons away from the work area.
- 2.5 Remove loose clothing. Remove ties, watches, rings and other loose jewelry, and contain long hair.
- 2.6 Always wear ANSI approved safety goggles when operating this jack.
- 2.7 Keep proper balance and footing, do not overreach and wear nonskid footwear.
- 2.8 Only use this equipment on a surface that is stable, level, smooth and capable of sustaining the load. Keep the surface clean, tidy and free from unrelated materials and ensure that there is adequate lighting.
- 2.9 Inspect the jack before each use. DO NOT use if bent, broken, cracked, leaking or otherwise damaged, any suspect parts are noted or it has been subjected to a shock load.
- 2.10 Vehicle must be properly and adequately supported before starting repairs.
- 2.11 DO NOT use this jack to lift or support assemblies such as a differential with axle, or a transmission with bell housing which will be bulky and difficult to balance, and may cause the jack to tip over and lead to property damage and/or serious personal injury.
- 2.12 Center load on the saddle and be sure the setup is stable and secure.
- 2.13 Never move this jack with a load any higher off ground than necessary and move

it slowly and carefully.

- 2.14 Transfer load immediately to appropriate support device for service or repair.
- 2.15 DO NOT operate this jack when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
- 2.16 DO NOT allow untrained persons to operate this product and DO NOT make any modifications to this product.
- 2.17 DO NOT expose the equipment to rain or snow.
- 2.18 Use a qualified person to maintain the equipment in good condition. Keep it clean for best and safest performance.
- 2.19 If the equipment need repairing and/or there are any parts that need to be replaced, have it repaired by authorized technicians and only use the replacement parts supplied by the manufacturer.
- 2.20 WARNING: The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

3. IMPORTANT RECEIVING INSTRUCTIONS AND

ASSEMBLY

Visually inspect all components for shipping damage. If any shipping damage is found, notify carrier at once. Shipping damage is NOT covered by warranty. The carrier is responsible for all repair or replacement cost resulting from damage in shipment.

- •Main Assembly •Saddle •Legs(2pcs)
- Castors (4pcs)
 Bolts, Washers, Nuts
- 3.1 Attach two legs (67) to the base (47) using bolts (39) and lock washers(69) washer (66)
- 3.2 Fit four castors (68) to the legs (67) using nuts (65) and washers (66).
- 3.3 Put the saddle (21) onto the top of the piston rod (22) and slip it down.

4. BEFORE FIRST USE

4.1 Leave the jack for one hour to allow the oil to settle before purging the system.

NOTE: Failure to allow sufficient time for the oil to settle could result in air remaining in the oil. In this event, the jack will not purge completely first time and a second purge will be required.

- 4.2 Purge the hydraulic circuit to eliminate any air in the system by turning the release handle(02) to the right and turning the air vent screw (19) counterclockwise by one turn then pumping the foot pedal (60) 15 to 20 times. Please keep the air vent screw (19) opening when you are using the transmission jack.
- 4.3 Test the jack, unladen, by raising it to full height and then lowering it. Open the release handle(02) to the right slowly to control the rate of descent.

5. OPERATING INSTRUCTIONS

WARNING! Ensure that you read, understand and apply the safety instructions and warnings before use. Failure to heed these instructions may result in property damage and/or personal injury.

5.1 Roll the transmission jack into position and pump the foot pedal (60) until saddle (21) reaches desired height.

NOTE: Follow vehicle manufacturer's recommended procedures for removing the load as outlined in vehicle service manual or repair guide.

5.2 Carefully center load on the saddle. Ensure the load's center of gravity is centered on the saddle and the setup is stable and secure.

NOTE: Before lowering load check to ensure all tools and personnel are clear and it is safe to lower the load.

5.3 **SLOWLY** and **CAREFULLY** turn the release handle(02) to the right to lower the load to its lowest possible position.

NOTE: The speed of lowering is controlled by the release handle. The more the valve is opened the more rapidly the jack descends. Ensure the decent is slow and controlled.

WARNING! Dangerous dynamic shock loads are created by quick opening and closing the release handle when the load is being lowered. The resulting overload may cause hydraulic system failure which could cause property damage and/or severe personal injury.

- 5.4 If necessary, **CAREFULLY** and **SLOWLY** move the jack.
- 5.5 Transfer load immediately to appropriate support device for service or repair.

6. MAINTENANCE

- 6.1 When not in use, store the jack in a dry location with saddle in lowest position.
- 6.2 Periodically check the piston rod for signs of rust or corrosion. Clean exposed areas with a clean oiled cloth.

Warning: Never use sandpaper or abrasive material on these surfaces!

6.3 A coating of light lubricating oil to pivot points, axles and hinges will help to

prevent rust and assure that castors, foot pedal and pump assemblies move freely. Periodically lubricate the pivot points, axles and hinges with a light lubricating oil as needed.

6.4 With jack in its lowest position, remove the air vent screw (19) to check the hydraulic oil level. If it is not adequate, add high quality hydraulic jack oil as necessary. Insert and tighten the air vent screw. Then purge away air from hydraulic system as described in 4.2.

Warning: DO NOT use brake fluid or any other improper fluid and avoid mixing different types of oil when adding hydraulic oil.

6.5 To ensure best performence and longer equipment life, replace the complete hydraulic oil at least once a year. With jack in its lowest position, remove the air vent screw (19), lay the jack on its side and drain the oil into a suitable container. Ensure that no dirt gets into the system. Set the jack in its level upright position, fill with approved hydraulic jack oil. Then replace the air vent screw (19) and purge away air from hydraulic system as described in 4.2.

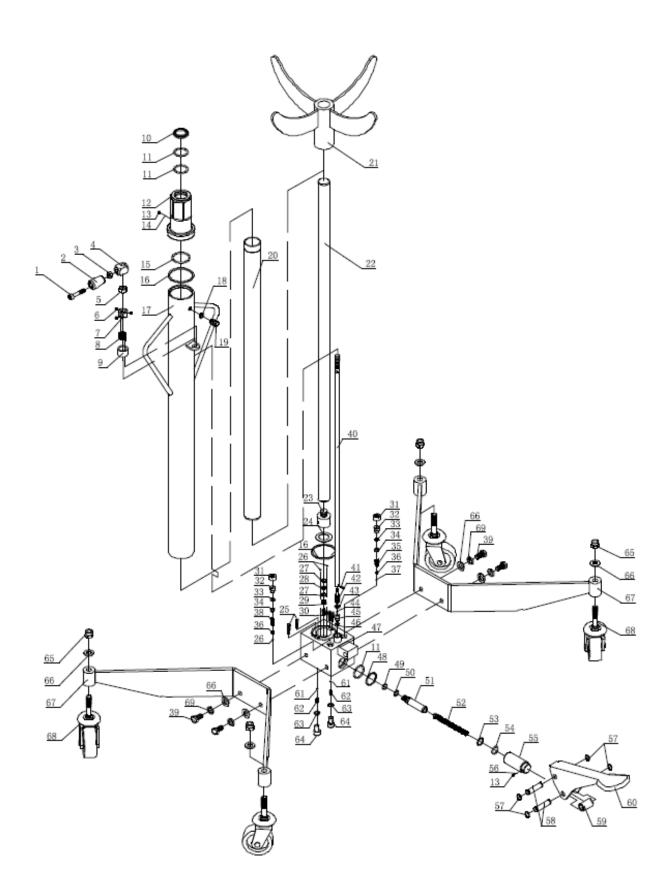
Note: Dispose of hydraulic oil in accordance with local regulations.

- 6.6 When equipment efficiency drops, purge away air from hydraulic system as described in 4.2.
- 6.7 It is recommended that an annual inspection be done by qualified technicians.

7.TROUBLESHOOTING GUIDE

Trouble	Cause	Solution	
Unit fails to extend or extends partially	1.Low fluid level	1.Refer to maintenance section and fill to correct fluid level (6.4)	
Incomplete or spongy cylinder response when foot pedal is pumped	1.Low fluid level	1.Fill to correct fluid level(6.4)	
	2.Air in system	2.Refer to maintenance section and fill to correct fluid level(4.2)	
	3.Pressure is low	3.Pressure regulating again	
Unit fails to extend when foot pedal is	1.Release handle malfunction	1.Pump foot pedal with release handle open	
pumped	2.Contamination	2.Disassemble and clean unit	
Cylinder doesn't retract or retract slow when release pedal is activated	1.Release handle malfunction or cylinder is binding	1.Disassemble unit;replace defective parts	
	2.Contamination	2.Disassemble and clean unit	

8. EXPLODED DRAWING



9. PARTS LIST

Part No.	Description	Qnty	Part No.	Description	Qnty
01	Screw M8 x 40	1	28	Filter	1
02	Release handle	1	29	Valve core	1
03	Nut M8	1	30	Spring	1
04	Base for handle	1	31	Screw protector	2
05	Nut M10	1	32	Screw	2
06	Screw M6 x 6	3	33	O ring	2
07	Permanent seat for spring	1	34	Screw	2
08	Spring	1	35	Spring	1
09	Spring sleeve	1	36	Base for steel ball	2
10	Dust ring	1	37	Steel ball	1
11	O ring	3	38	Spring	1
12	cover	1	39	Bolt M12*25	4
13	Screw M6 x 5	2	40	Connecting rod for	1
				release valve	
14	Steel ball	1	41	Pin	1
15	O ring	1	42	Valve rod	1
16	Washer	2	43	O ring	1
17	Reservoir	1	44	Steel ball	1
18	Seal ring	1	45	Base for release valve	1
19	Air vent screw	1	46	Washer	1
20	Cylinder	1	47	Base	1
21	Saddle	1	48	PTFE washer	1
22	Piston rod	1	49	O ring	1
23	Piston	1	50	PTFE washer	1
24	Washer	1	51	Small piston	1
25	Filter	4	52	Spring	1
26	Steel ball	3	53	PTFE washer	1
27	Hole ring shaft	2	54	O ring	1

Part No.	Description	Qnty	Part No.	Description	Qnty
55	Big piston	1	63	Copper ring	2
56	Steel ball	1	64	Screw	2
57	Check ring	4	65	Nut M12	4
58	Pin	2	66	Washer Ø12	8
59	Shaft sleeve for	1	67	Leg	2
	Pin				
60	Foot pedal	1	68	Castors	4
61	Steel ball	2	69	Lock washer	4
62	Spring	2			