



Model:FPL-1.5TF

1-1/2 Ton Truck Transmission Jack



NOTE: BEFORE USING THIS JACK, PLEASE READ THIS MANUAL, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE OF THIS JACK.

Carefully inspect all components for shipping damage. If shipping damage is found, notify carrier at once. The carrier is responsible for any damage resulting from shipment.

1. SAFETY



To avoid personal injury or property damage, please follow all safety precautions. We cannot be responsible for injury or damage resulting from unsafe and incorrect products use or system operation, or lack of maintenance.

WARNING indicates a potential danger that requires correct action to avoid personal injury.

IMPORTANT indicates correct action to prevent damage or equipment failure.



WARNING:

- The hydraulic equipment operator must be a qualified operator familiar with correct training and work experience of hydraulic equipment. Lack of knowledge in any of these areas can lead to equipment damage or personal injury.
- Read, understand, and follow all instructions before operating this jack.
- Inspect the jack before each use. Do not use jack if damaged, altered, modified, leaking hydraulic fluid or with missing or loose components.
- To avoid personal injury, never modify or weld hydraulic equipment.
- Never lift more than the rated capacity of the jack, overloading causes equipment failure and possible personal injury.
- The jack is a load lifting device, not a load holding device. Once the load has been positioned, it must always be supported mechanically. Never work under, or around a load only supported by hydraulic means.
- Never put unbalanced or off-center loads on the jack saddle. Do not use saddle adapters or saddle extenders between the stock lifting saddle and the load. The incorrect loading can result in equipment failure
- This jack was designed for lifting transmissions only. Consult the vehicle manufacturer for the transmission's center of balance.
- Secure the transmission to the jack's saddle with the anchorage restraint system provided before raising or lowering the transmission.
- Use of this product is limited to the removal, installation and transportation in the lowered position, of transmissions, transfer cases and trans axles.
- Always wear safety glasses and/or other protective equipment that meet or exceed ANSI Z87.1 and OSHA standards.
- Use the jack **ONLY** on hard, level surfaces capable of sustaining the load. Use on other surface

IMPORTANT

- Keep the jack clean at all time.
- When the jack is not in use, release the valve and make all piston rod return to the jack.
- Use hydraulic equipment in normal operating temperatures. Do not use equipment in temperatures of 65 °C (150 °F) or higher. Overheating will soften seals and weakens hose material, resulting in oil leaking or other equipment failure.

2. DESCRIPTION

The Transmission Jack is used for the removal, installation and moving of heavy duty truck transmissions.

SPECIFICATIONS

Model#	Lifting Capacity	Min. Height	Max. Height	Net Weight	Gross Weight	Package Size
FPL-1.5TF	1.5 Ton	918mm	1854mm	66Kg	74Kg	1150*718*405mm

3. SETUP

PLEASE REFER TO THE EXPLODED VIEW DRAWING IN THIS MANUAL IN ORDER TO IDENTIFY PARTS.

- Install the Part #3-7 and Part 3-13 brackets in the Part #3-8 saddle plate with the Part #3-6 bolts, Part #3-9 washers and Part #3-10 wing nuts.
- Attach the Part #3-4 chains to the Part #3-7 brackets. Secured to brackets with the Part #3-1 bolts, Part #3-2 washers, Part #3-3 lock washers and Part #3-5 nuts.
- Assemble the Part #3-16 chain hooks to the Part #3-15 adaptor bolts with the Part #3-14 wing nuts..
- Secure the Part #3-15 adaptor bolts to the two remaining Part #3-13 brackets using the Part #3-12 washers and Part #3-11 nuts.

4. PURGING AIR FROM THE HYDRAULIC SYSTEM:

- Rotate the knob at the top of the hydraulic block in a clockwise direction until tight. Now turn it in a counterclockwise direction two full turns.
- Activate the hand to pump about 15- 20 times.
- Rotate the knob at the top of the hydraulic block in a clockwise direction until tight.
- Activate the hand pump until the lift arm is raised to maximum height.

5. OPERATING INSTRUCTIONS

- Position the jack under the transmission.
- Close the control valve. Operate the pump handle to raise the boom and align the mounting plate with the transmission.
- Remove the transmission according to the instructions in the vehicle service manual.
- Position the transmission on the saddle plate, resting against the angle plates.
- Secure the transmission to the saddle plate.
- Lower the load by slowly opening the control valve. The control valve regulates how fast the boom is lowered.

6. MAINTENANCE

IMPORTANT: Dirt is the greatest single cause of failure in hydraulic units. Keep the jack clean

and well lubricated to prevent foreign matter from entering the system. If the jack has been exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

- Store the jack in a well-protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful elements.
- Regularly lubricate the moving parts.
- To check the oil level, place the jack on level ground and lower the lift arm completely. Remove the filler plug. The oil level should be within 3/8" of the filler plug hole. Do not overfill. If necessary, add approved anti-wear hydraulic jack oil, and install the filler plug again.

IMPORTANT: The use of alcohol, hydraulic brake fluid or detergent motor oil could damage the seals and result in jack failure.

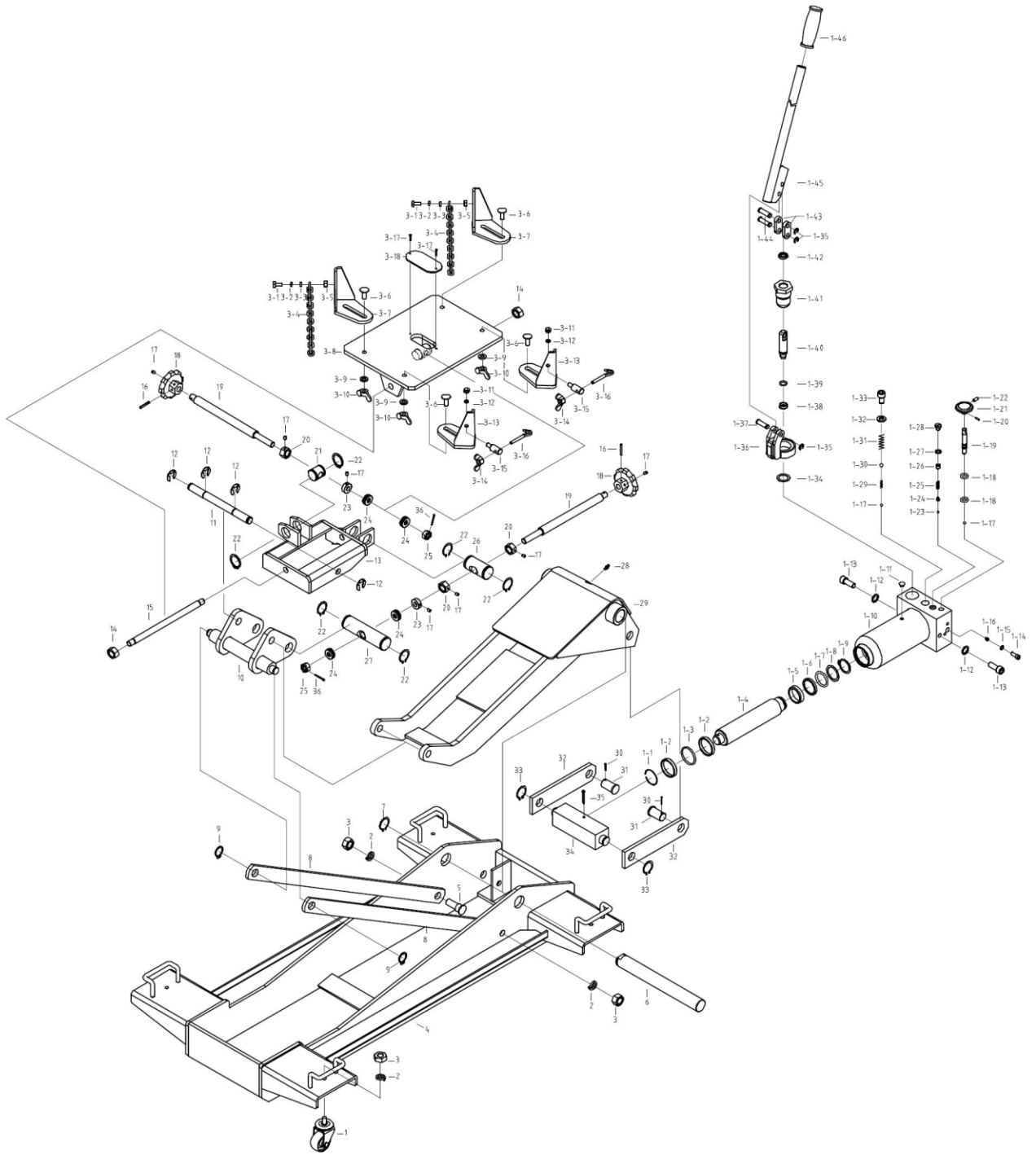
- Inspect the jack before each use. Do not use jack if damaged, altered, modified, leaking hydraulic fluid or with missing or loose components.

7. TROUBLESHOOTING

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment

Trouble	Cause	Solution
Jack does not lift	1. Release valve is open.	<i>1. Close release valve.</i>
	2. Low/no oil in reservoir.	<i>2. Fill with Oil and bleed system.</i>
	3. Air-locked system.	<i>3. Bleed system.</i>
	4. Load is above capacity of jack.	<i>4. Use correct equipment</i>
	6. Packing worn out or defective.	<i>6. Install seal kit</i>
Jack lifts only partially	1. Too much or not enough oil.	<i>1. Check Oil/level!</i>
Jack advances slowly	1. Pump not working correctly.	<i>1. Install seal kit, or replace power Unit.</i>
Jack lifts load, but doesn't hold	1. Cylinder packing is leaking.	<i>1. Install seal kit</i>
	2. Valve not working correctly (suction, delivery, release, or bypass).	<i>2. Inspect valves. Clean and repair seat surfaces.</i>
	3. Air-locked system.	<i>3. Bleed system.</i>
Jack leaks oil	1. Worn or damaged seals.	<i>1. Install seal kit.</i>
Jack will not retract	1. Release valve is closed.	<i>1. Open or clean release valve.</i>

1- 1/2 TON TRANSMISSION JACK PART LIST



PART LIST

Part No	Description	Qty.	Part No	Description	Qty.
1	Wheel Assy.	4	1-15	Copper Washer	1
2	Washer	6	1-16	Valve	1
3	Nut	6	1-17	Steel Ball	2
4	Frame	1	1-18	O-ring	2
5	Bolt	2	1-19	Release Valve	1
6	Shaft	1	1-20	Pin	1
7	Washer	1	1-21	Release Knob	1

8	Rod Link	2	1-22	Bolt	1
9	Washer	2	1-23	Steel Ball	1
10	Saddle Seat	1	1-24	Ball Seat	1
11	Shaft	1	1-25	Spring	1
12	Washer	4	1-26	Screw	1
13	Bracket	1	1-27	Sealing Washer	1
14	Nut	2	1-28	Screw	1
15	Shaft	1	1-29	Spring	1
16	Pin	2	1-30	Steel Ball	1
17	Bolt	7	1-31	Spring	1
18	Hand Wheel	2	1-32	Copper Washer	1
19	Adjustment Rod	2	1-33	Screw	1
20	Nut	3	1-34	Copper Washer	1
21	Shaft	1	1-35	Washer	3
22	Retaining Ring	6	1-36	Bracket	1
23	Nut	2	1-37	Pin	1
24	Bearing	4	1-38	Y-ring	1
25	Nut	2	1-39	O-ring	1
26	Shaft	1	1-40	Cylinder Pump	1
27	Shaft	1	1-41	Pump Cylinder	1
28	Grease Fitting	1	1-42	Wiper Ring	1
29	Lift Arm	1	1-43	Link Plate	2
30	Pin	2	1-44	Pin	2
31	Shaft	2	1-45	Handle	1
32	Rod Link	2	1-46	Handle Sleeve	1
33	Washer	2	3-1	Bolt	2
34	Rod Link	1	3-2	Washer	2
35	Pin	1	3-3	Washer	2
36	Pin	2	3-4	Chain	2
1-1	Snap Ring	1	3-5	Nut	2
1-2	Washer	2	3-6	Bolt	4
1-3	O-ring	1	3-7	Bracket	2
1-4	Piston Rod	1	3-8	Bracket	1
1-5	Piston Ring	1	3-9	Washer	4
1-6	Sealing Washer	1	3-10	Nut	4
1-7	O-ring	1	3-11	Nut	2
1-8	Washer	1	3-12	Washer	2
1-9	Washer	1	3-13	Bracket	2
1-10	Body	1	3-14	Nut	2
1-11	Oil Filler Plug	1	3-15	Bolt	2
1-12	Washer	2	3-16	Hut	2
1-13	Bolt	2	3-17	Bolt	2
1-14	Bolt	1	3-18	Board	1