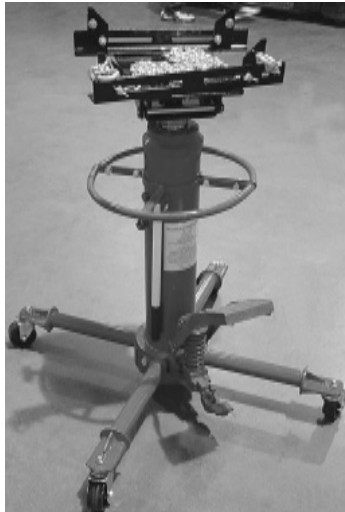




1/2 Ton - 2 Stage Transmission Jack

Model 34032

ASSEMBLY AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

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3491 Mission Oaks Blvd., Camarillo, CA 93011

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Read this material before using this product. Failure to do so can result in serious injury.

SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

Specifications

Base Height	36"	Base Dimensions	35" x 31-1/2"
Saddle Size	13-3/8" x 9-1/2"	Saddle Thickness	.330"
Lifting Capacity	1/2 Ton (1000 Lbs.)	Extended Height	76-1/4"
Controls	Foot Pedal Type	Swivel Casters	Ball Bearing Type
Construction	Steel	Net Weight	158 Lbs.
Saddle Tilt	Forward 53° Backward 13° Side to Side 10°-30°		

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be

caught in moving parts. Protective, clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

7. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
9. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
10. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before operating.
11. **Avoid unintentional lowering.** Keep feet and hands away from the pump pedal and release pedal when you are not prepared to raise or lower the jack.
12. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
13. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
14. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
15. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
16. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
17. **Do not exceed the weight limit of this jack.** Overloading the jack may result in unexpected, rapid lowering of the object being held, as well as damage to the jack itself. Serious injury and property damage may result.

18. **Assure that any load being supported by this jack is well balanced on the Jack.** Unbalanced loads may cause the jack to fall over potentially causing serious personal injury or property damage.
19. **This jack is not to be used for any aircraft purposes.**
20. **Only use the Jack on a flat level solid surface** that is capable of supporting the weight of the Jack, the vehicle and all lifting equipment.
21. **DO NOT EXCEED THE MANUFACTURER’S RECOMMENDED PRODUCT WEIGHT CAPACITY.** Doing so can result in personal injury and/or damage to the product. **Caution:** Always be aware of Dynamic Loading. If you drop a weight on the Jack, it may create for a brief instant, an excess load, which may result in damage to the Jack and/or personal injury.

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.

Unpacking

When unpacking, check to make sure the following parts are included.

- | | |
|-------------------------------------|--|
| <i>(1) Jack Cylinder Set</i> | <i>(4) Caster Wheel Sets with hardware</i> |
| <i>(2) Leg Sets with hardware</i> | <i>(2) Angle Plate Sets with hardware</i> |
| <i>(1) Saddle Set with hardware</i> | <i>(1) Handle Set</i> |
| <i>(1) Round Handle Set</i> | |

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

Assembly

Prepare for assembly by having a clean, well lighted location. You will probably assemble the jack on the floor, but a work table will be helpful for some sub-assembly. You will need several small open-end or adjustable wrenches (not included) to complete assembly.

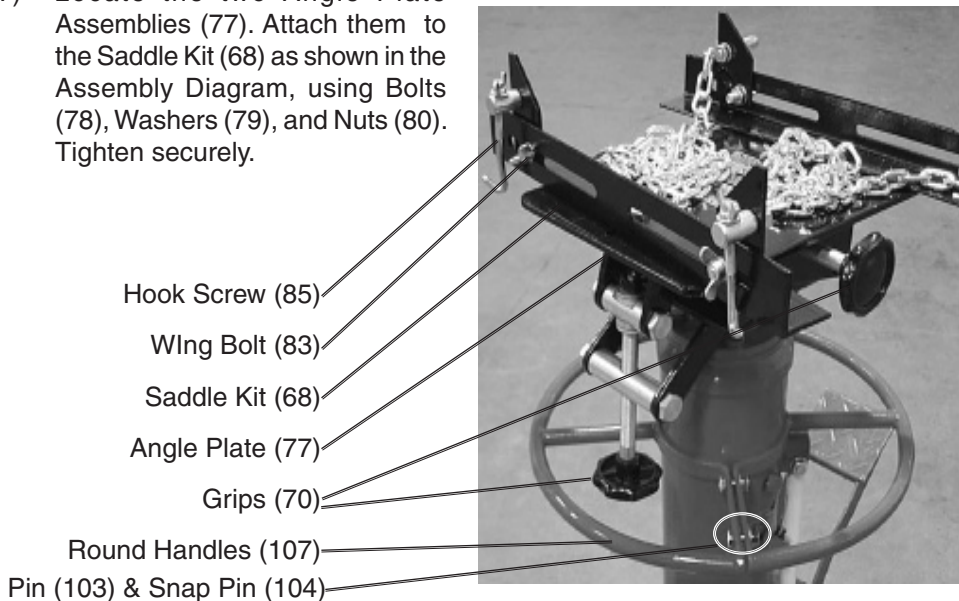
- 1) Locate the two Leg Assemblies (90) and (91). Assemble them to each other, and to the Base (01) of the Cylinder Set using the Bolts (93) and (98), Spring Washers (99), and Nuts (100) as shown in the Assembly Diagram. Tighten all fasteners securely.



Shipping Plug
Oil Filler Plug

- 2) Locate the four Caster Assemblies (94), four Nuts (96) and four Spring Washers (95). Attach a Caster to each of the legs in the Leg Sets (90) and (91) using a Spring Washer (95) and Nut (96) as shown in the Assembly Diagram. Tighten securely.

- 3) Locate the round Handle (107). Install it on the side of the Reservoir (03) using the Pin (103) and Snap Pin (104) as in the photo.
- 4) Remove the “shipping plug” from the oil filler hole on the side of the Reservoir (03). Replace it with the Oil Filler Plug (105) as in the photo. Do not over tighten.
- 5) Locate the Saddle Set. Position it on top of the Ram (19), as indicated by “A” in the Assembly Diagram. Install Nut (62) to secure the Saddle Set in place. Tighten securely.
- 6) Locate the two Round Handles (107). Position them around the Reservoir (03) as shown in the photo. Secure in place with the four Bolts (98), Spring Washers (99) and Nuts (100). Tighten securely.
- 7) Locate the two Angle Plate Assemblies (77). Attach them to the Saddle Kit (68) as shown in the Assembly Diagram, using Bolts (78), Washers (79), and Nuts (80). Tighten securely.



NOTE: The Jack Cylinder is prefilled with hydraulic oil, and does not require filling. However, the “shipping plug” must be replaced with the Oil Filler Plug (105) before first use of the jack.

WARNING: Before using this jack, you must remove the “shipping plug” and install the Oil Filler Plug (105). Do not damage the Seal (106) by overtightening.

WARNING: Do not overload this jack, which has a 1/2 Ton (1000 Lbs. capacity). The jack may be damaged, and you may experience unplanned, rapid lowering of the load. This may cause severe personal injury or property damage.

WARNING: Do not carry an unbalanced load, or a load not appropriate to the designed use of this jack. The jack may topple over causing serious personal injury or property damage.

Operation

WARNING: Before standing or working underneath any elevated vehicle or other object, be sure that the vehicle is properly and safely secured following recommendations of the lift manufacturer. For your safety and the safety of others, use good professional practice and common sense.

- 1) The jack may easily be moved by gripping the Handle (101) and rolling it on its casters. Locate the jack under the transmission. Repeatedly press the Pump Pedal (53) with your foot to raise the jack until the Saddle Set nearly contacts the underside of the transmission. Adjust the position of the jack so that it is centered directly under the center of gravity of the transmission.
- 2) It is important for your safety to get a good contact between the Saddle Set and the transmission. This will assure that the transmission is properly supported and balanced once removed from the vehicle and on the jack. Using the Grips (70), adjust the angle of the Saddle (68) so that it is best aligned with the transmission. Press the Pump Pedal (53) again until the Saddle (68) contacts and will support the weight of the transmission.
- 3) The positions of the Chains and Hook Screws can be adjusted using the Wing Bolts (83). Secure the transmission to the Saddle (68) by passing the chains (88) over the top of the transmission, and securing them to the Hook Screws (85). Tighten the chains by tightening the Wing Nuts (75). **Double check that the transmission is safely and securely attached to the Saddle Set.**
- 4) Remove the bolts and fittings attaching the transmission to the vehicle and separate the transmission, as recommended by the vehicle shop manual.
- 5) Lower the transmission slightly by briefly pressing the Pedal Release (39). Recheck the transmission to assure that it is securely and safely attached to the Saddle (68). Make any necessary adjustments. When it is safe to do so, lower the transmission all the way by pressing the Pedal Release.
- 6) Using the Handle (101), and stabilizing the transmission on the jack, roll the transmission out from under the vehicle to the work location where it will be repaired. It is a good idea to have an assistant help you lower and move the transmission.

WARNING: The use of this jack is limited to the removal, installation, and transportation in the lowest position, of transmissions and differentials. It is not designed to store transmissions or other parts. No transmission or other part should be left on the jack for an extended period of time.

Do not overload. The capacity of this jack is 1/2 Ton (1000 Lbs.). Overloading can cause damage to the jack and cause consequential personal or property injury. This jack is designed to use only on hard, level surfaces capable of supporting the load. Use on other surfaces may cause instability and possible property damage or personal injury.

Maintenance

- 1) The hydraulic system is closed and will normally require no maintenance.
- 2) The mechanical parts of the jack, such as the pedal and release should be occasionally lubricated with heavy oil or grease.
- 3) Protect the jack cylinder from dirt or grit, when in the raised position. If it becomes dirty, wipe it off with a clean cloth.
- 4) Maintain and store the jack in a reasonably protected environment. Do not expose to rain or excess moisture. Protect from salt water or other corrosive materials. If it becomes dirty or contaminated, clean it promptly with clean water or a suitable detergent. If using a pressure washer, be aware that you may remove some paint from the outer surface. Never apply a pressure washer to the seal areas near the pistons or valves. Be sure to lubricate external moving parts after cleaning.
- 5) If the jack “fades”, allowing a load to slowly lower on its own, you may have damaged seals or insufficient jack oil. First check the oil level. If the level is OK, take the jack to a qualified repair person for seal replacement. Damaged seals may be caused by overloading, or exposure to harmful conditions or inappropriate use of a pressure washer. NOTE: If the jack can be pumped up to its highest position, it indicates that there is enough oil. If the jack fades from this position, it indicates that the problem is likely with the seals.
- 6) To check the oil level, be sure the jack is in its lowest position. Remove the Oil Filler Plug (105). The oil level should be at the bottom of the filler plug hole. You can visually see the oil, or test with your finger. If the oil level is low, add any good hydraulic oil of 15/40 viscosity. Do not use any other oil or brake fluid, which will damage the seals.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part	Description	Qty
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Part	Description	Qty
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Cylinder Set

01	Base	1
02	Cylinder	1
03	Reservoir	1
06	Snap Ring	1
07	Retainer, Ram	1
08	Ram	1
10	Top Nut	1
11	Packing	1
12	"O" Ring	1
13	Flange	1
14	Seal	1
15	Dust Seal	1
16	Spring Washer	1
17	Bolt	1
18	Retainer, Ram	1
19	Ram	1
20	"O" Ring	1
21	Top Nut	1
22	Seal	1

29	Dust Seal	1
30	Pump Piston	1
31	Spring	1
32	Washer	1
33	Bolt, Check Valve	1
44	"O" Ring	2
45	Hex Head Cap Screw	4
48	Spring Retainer	1
49	Spring	1
50	Spring Retainer	1
51	Connecting Rod	1
52	Set Screw	1

Release Valve Set

34	"O" Ring	1
35	Release Valve	1
36	Spring	1
37	Base, Release Valve	1
38	Pin	1
39	Pedal, Release Valve	1

23	Dust Seal	1
46	"O" Ring	1
47	Air Vent Valve Ass'y	1
105	Oil Filler Plug	1
106	Seal	1

Pump Set

24	Pump Base	1
25	Steel Ball	1
26	Washer	2
27	Pump Cylinder	1
28	Seal	1

40	Pin	1
41	Snap Ring	2
42	Spring Washer	4
43	Hex Head Cap Screw	4
108	Steel Ball	1

Pump Pedal Set

53	Pedal, Pump Plston	1
54	Link	2
55	Cotter, Link	2
56	Washer	4
57	Snap Pin	2

Part	Description	Qty
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Pump Pedal Set

53	Pedal, Pump Plston	1
54	Link	2
55	Cotter, Link	2
56	Washer	4
57	Snap Pin	2
58	Connecting Rod	1
109	Bolt	4
110	Washer	2

Saddle Set

61	Bottom Plate Ass'y	1
62	Nut	1
63	Stationary Rod	1
64	Bolt	4
65	Tilting Saddle Ass'y	1
66	Stationary Rod	1
67	Connecting Rod	1
68	Saddle Kit	1
69	Adjustable Screw	1
70	Grip	2
71	Spring Pin	2

Part	Description	Qty
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Angle Plate Set

77	Angle Plate	2
78	Bolt	2
79	Washer	2
80	Nut	2
81	Stationary Plate	2
82	Stationary Plate	2
83	Wing Bolt	4
84	Hook Pin	2
85	Hook Screw	2
86	Eye Bolt	2
87	Shackle	2
88	Chain	2
89	Shackle Bolt	2

Leg Set

90	Leg Ass'y	1
91	Leg Ass'y	1
92	Spring Washer	3
93	Bolt	3
98	Bolt	3

72	Spacing Collar	1
73	Thrust Bearing	4
74	Washer	10
75	Nut	12
76	Adjustable Screw	1
111	Snap Ring "C"	2

Round Handle Set

107	Handle	2
98	Bolt	4
99	Spring Washer	4
100	Nut	4

99	Spring Washer	3
100	Nut	3

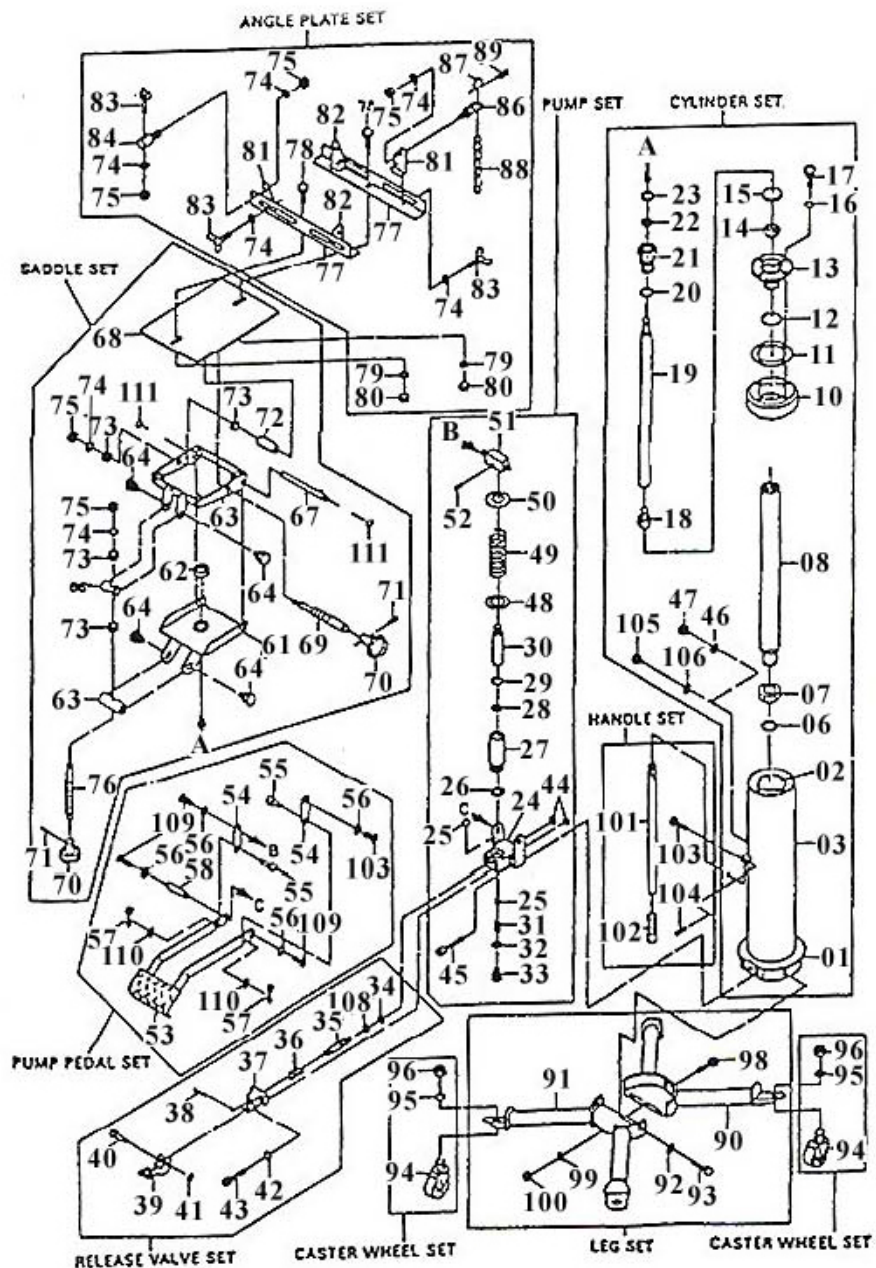
Caster Wheel Set

94	Caster Ass'y	4
95	Spring Washer	4
96	Nut	4

Handle Set

101	Handle	1
102	Grip	1
103	Pin	1
104	Snap Pin	1

Assembly Drawing



Note: Round Handle (107) - not shown.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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