

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Hydraulic Hand Pallet Trucks

E
N
G
L
I
S
H

E
S
P
A
Ñ
O
L

F
R
A
N
C
A
I
S

Description

Dayton hand hydraulic pallet trucks are manually operated industrial duty products designed to lift a maximum weight as specified below. Safety features include an overload bypass valve and a pressure compensated flow valve for controlled lowering. A hand-actuated control lever for selecting "raise," "neutral," and "lower" positions is standard.

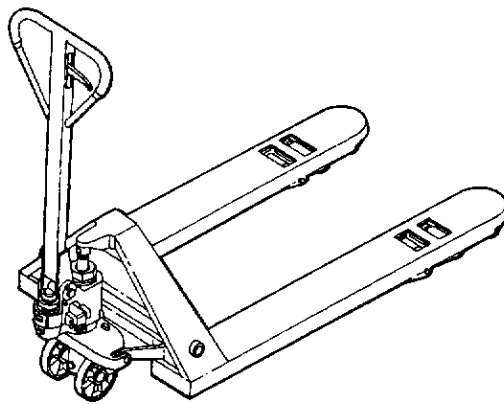


Figure 1
Specifications

	2ZE57	2ZE60
Up/Down Control	Hand Actuated	Hand Actuated
Front Wheels per Fork	Entry, Load, Exit	Entry, Load, Exit
Steering Wheels	Steel Hub w/ Polyurethane Coating	Steel Hub w/ Polyurethane Coating
Strokes to Raised Height	5*	14
	12**	
Push Rods	Solid Steel	Solid Steel — Adjustable length
Forks	Steel — 6 ⁵ / ₁₆ " wide	Steel — 6 ⁵ / ₁₆ " wide
Steering Radius	210°	210°
Handle Return	Return to Vertical	Return to Vertical
(*) Cargo load weight under 450 lbs. (**) Cargo load weight over 450 lbs.		

Unpacking

Refer to Repair Parts List to aid in identifying parts. Unpack and separate all components from container, making

sure all parts are accounted for. If damage is evident, notify delivering carrier immediately and file necessary claims.

Dimensions

Model	Load Capacity	Lowered Height of Forks	Raised Height	Overall Width Across Forks	Fork Width	Fork Length	Overall Length	Weight
2ZE57	5,500 lbs.	2 ⁷ / ₈ "	7 ³ / ₄ "	27"	6 ⁵ / ₁₆ "	48"	63 ⁵ / ₁₆ "	185 lbs.
2ZE60	8,000	2 ⁷ / ₈ "	7 ³ / ₄ "	27"	6 ⁵ / ₁₆ "	48"	63 ⁵ / ₁₆ "	200

General Safety Information

In order to have a trouble free pallet truck, it is important to take caution during usage to ensure a long service life.

1. Inspect the pallet truck for transit damage before operation. Carefully read all manuals included with this product **before** putting into service. Be thoroughly familiar with the controls and the proper use of the pallet truck.
2. Never overload the pallet truck. Stay within the rated capacity of the truck.
3. Distribute the load evenly on the forks — do not concentrate loads at one point, or load one fork more than the other.
4. Be especially cautious when using the pallet truck to move or set machinery. It is very easy to make the mistake of lifting at points that will develop concentrated or unbalanced loads that can damage the pallet truck.
5. Do not allow loaded pallet truck to drop from one floor level to another. Even a drop of one inch results in a "shock", which can bend or break components.
6. The pump's piston rod and lifting ram are polished with a hardened chrome-plate finish to provide maximum seal life and minimize oil leakage. Do not allow these surfaces to be nicked or pitted by abuse. Slight oil wetting of the external part of the piston is normal, as in all hydraulic

Dayton® Hydraulic Hand Pallet Trucks

E
N
G
L
I
S
H

General Safety Information (Continued)

systems. This oil film provides lubrication between the polished surfaces and the seals through which they pass. Do not be alarmed at a trace of oil, even on new units.

7. Always remove load before making repairs. Completely immobilize pallet truck before working on components that might pinch fingers or hands if movement were allowed.
8. Never allow anyone to ride a pallet truck "scooter style". All heavy material handling equipment should be operated with the utmost regard for the safety of oneself and others.
9. Never leave a loaded pallet truck unattended.
10. Always lower forks when trucking is completed.
11. Avoid abrasive or corrosive environments and/or materials that may tend to spill onto pallet truck parts.

Assembly

2ZE60 HANDLE ASSEMBLY

1. Remove roll pin, and handle shaft from pump body (See Figure 2).
2. Insert handle assembly into pump body with Up/Down control oriented to right.
3. Install handle shaft into pump base, fixing handle in position. Secure in position with roll pin. Rotate handle shaft until through hole is vertical.
4. Feed chain (included in handle assembly) through hole in handle shaft. Attach chain to lowering lever (See Figure 3).

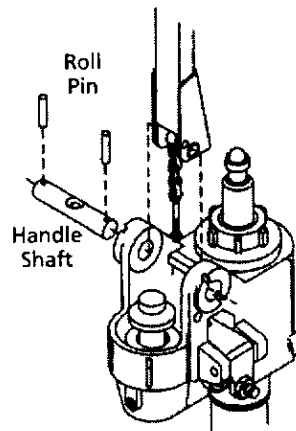


Figure 2 - Handle Assembly

5. Lower handle. Remove shipping pin holding cylinder.
6. Position Up/Down control in LOWER or "up" position (See Figure 5). Pump handle several times to release air from pump.

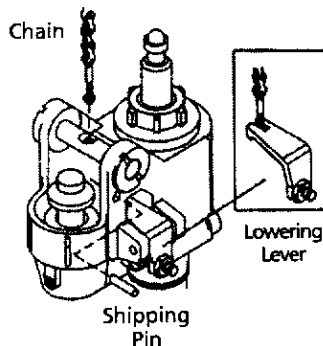


Figure 3 - Lowering Lever

FORK ADJUSTMENT (2ZE57 & 2ZE60)

If the forks descend quickly after elevating, or forks rise when Up/Down control lever is in neutral position, adjust as follows: (See Figure 4)

1. Unlock set screw, located on lowering lever, by loosening lock nut.
2. Rotate set screw counterclockwise 1/2 turn and retry fork operation. Continue adjusting until satisfactory operation is obtained.
3. Lock set screw into position with lock nut.

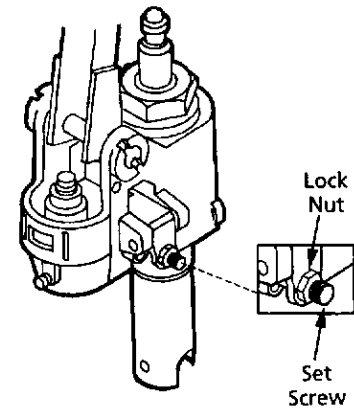


Figure 4 - Lever Adjustment

Operation

The three position control lever is operated as follows: (See Figure 5)

TO RAISE

Insert the forks into the pallet. Move the control lever into RAISE or "down" position. With an up/down motion, pump the pallet jack up to desired height.

Models 2ZE57 and 2ZE60

ENGLISH

Operation (Continued)

NEUTRAL

When finished raising the pallet truck, move control lever into NEUTRAL or "center" position. Move the pallet truck to desired location.

TO LOWER

Move the control lever into the LOWER or "up" position until desired height has been reached.

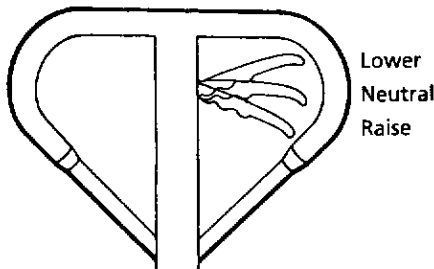


Figure 5 - Control Lever

Maintenance

All bushings and bearings have been lubricated at the factory. To increase their life, it is suggested that regular maintenance be performed. Using the appropriate grease for the environment, lubricate each grease fitting every 6 months. Change hydraulic oil every 10-12 months. Harsh environments may require more frequent maintenance.

DAILY

Visually check and do not use if any of the following are visible:

1. Oil leaks.
2. Structural deformation of arms, forks, or any other component.
3. Unusual noise or binding of the lifting mechanism.

MONTHLY

1. Check hydraulic oil level (more frequently for high use applications). See "Adding Hydraulic Oil" section.
2. Verify that all labels are in place and in good condition.
3. Clean off dirt and debris.

YEARLY

Change oil (more frequently if color has substantially darkened or feels gritty).

NOTE: If hydraulic oil is milky white in color, water is in the hydraulic system. Change the hydraulic oil immediately.

ADDING HYDRAULIC OIL TO PUMP RESERVOIR

NOTE: Use standard hydraulic oil.

Refer to Figures 7 and 9.

CAUTION Pallet truck is heavy, use proper safety equipment and ask for help lifting the truck.

MODEL 2ZE60

1. Ensure forks are in lowered position.
2. Remove drain plug (Part No. MH60-125G).
3. Add hydraulic oil until level of oil is at bottom of hole.
4. Replace fill plug.

For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

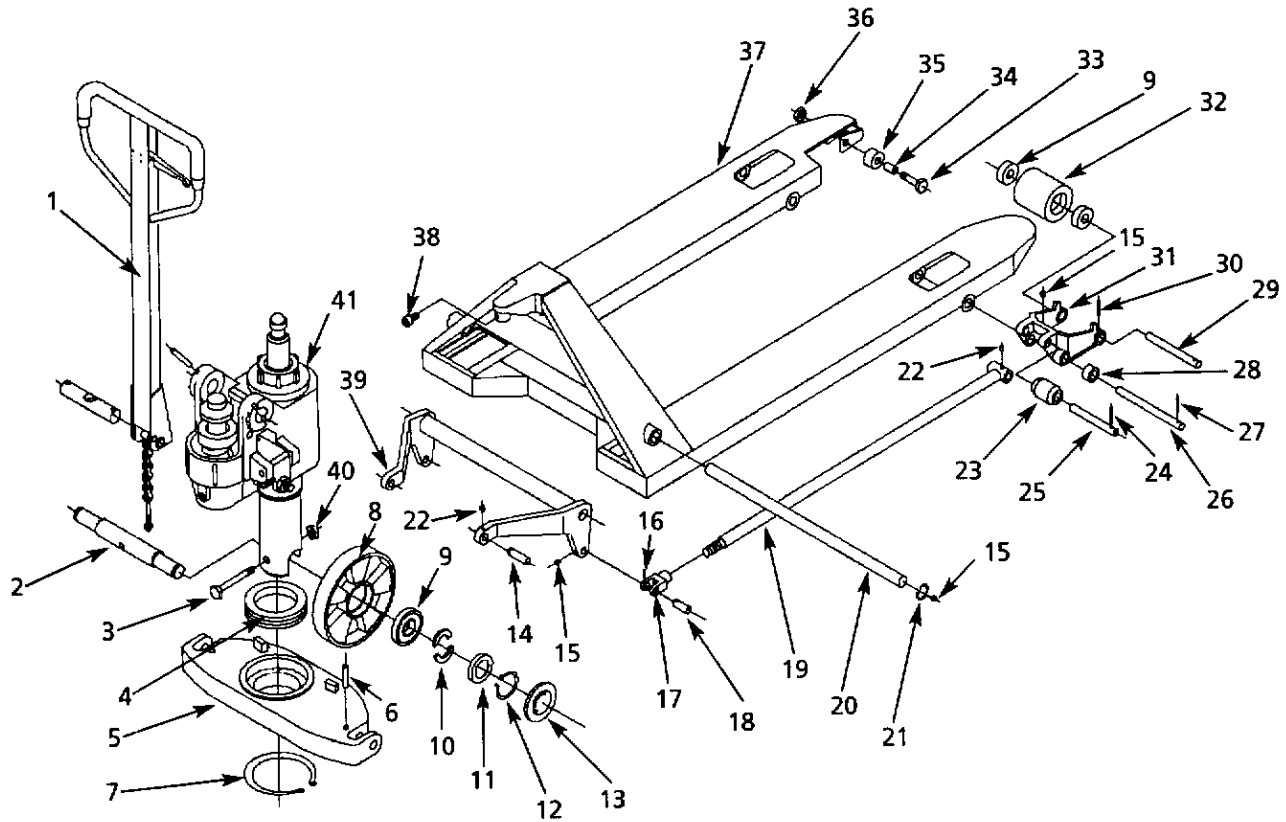
Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts
 P.O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

E
N
G
L
I
S
H



Assembly Kits

- ▲ = 8, (2)-9, 10, 11, 12, 13
- = (2)-9, 29, 30, 32
- = 33, 34, 35, 36

Figure 6 - Repair Parts Illustration for General Assembly

Repair Parts List for General Assembly

Ref. No.	Description	Part No. for 2ZE57	Qty.	Ref. No.	Description	Part No. for 2ZE57	Qty.
1	Handle assembly (See Figure 7)	MH57-1G	1	24	Roll pin	MH57-24G	4
2	Wheel shaft	MH57-2G	1	25	Push pin	MH57-25G	4
3	Bolt	MH57-3G	1	26	Exit axle	MH57-26G	4
4	Bearing	MH57-4G	1	27	Roll pin	MH57-27G	4
5	Base	MH57-5G	1	28	Spacer	MH57-28G	2
6	Roll pin	MH57-6G	2	29	Lift axle	■	4
7	Snap ring	MH57-7G	1	30	Roll pin	■	2
8	Wheel-main	▲	2	31	Wheel bracket	MH57-31G	4
9	Bearing	6L026,▲,■	12	32	Lift wheel	■	4
10	Split washer	▲	2	33	Bolt	●	2
11	Washer	▲	2	34	Bushing	●	2
12	Snap ring	▲	2	35	Entry wheel	●	2
13	Wheel cap	MH57-13G,▲	2	36	Nut	●	2
14	Pin	MH57-14G	2	37	Fork base	MH57-37G	1
15	Oiler	MH57-15G	4	38	Screw	MH57-38G	1
16	Roll pin	MH57-16G	2	39	Rocker arm	MH57-39G	1
17	Rod end	MH57-17G	2	40	Nut	MH57-40G	1
18	Pin	MH57-18G	2	41	Hydraulic Pump (See Figure 7); page 6	MH57-41G	1
19	Push rod	MH57-19G	2	▲	Main Wheel Kit*	MH57-42G	1
20	Rocker shaft	MH57-20G	1	■	Lift Wheel Kit**	MH57-43G	1
21	Snap ring	MH57-21G	2	●	Entry Wheel Kit	MH57-44G	1
22	Oiler	MH57-22G	4				
23	Exit wheel	MH57-23G	4				

(*) Also available in nylon construction. Order part number MH57-45G.

(**) Also available in nylon construction. Order part number MH57-46G.

For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

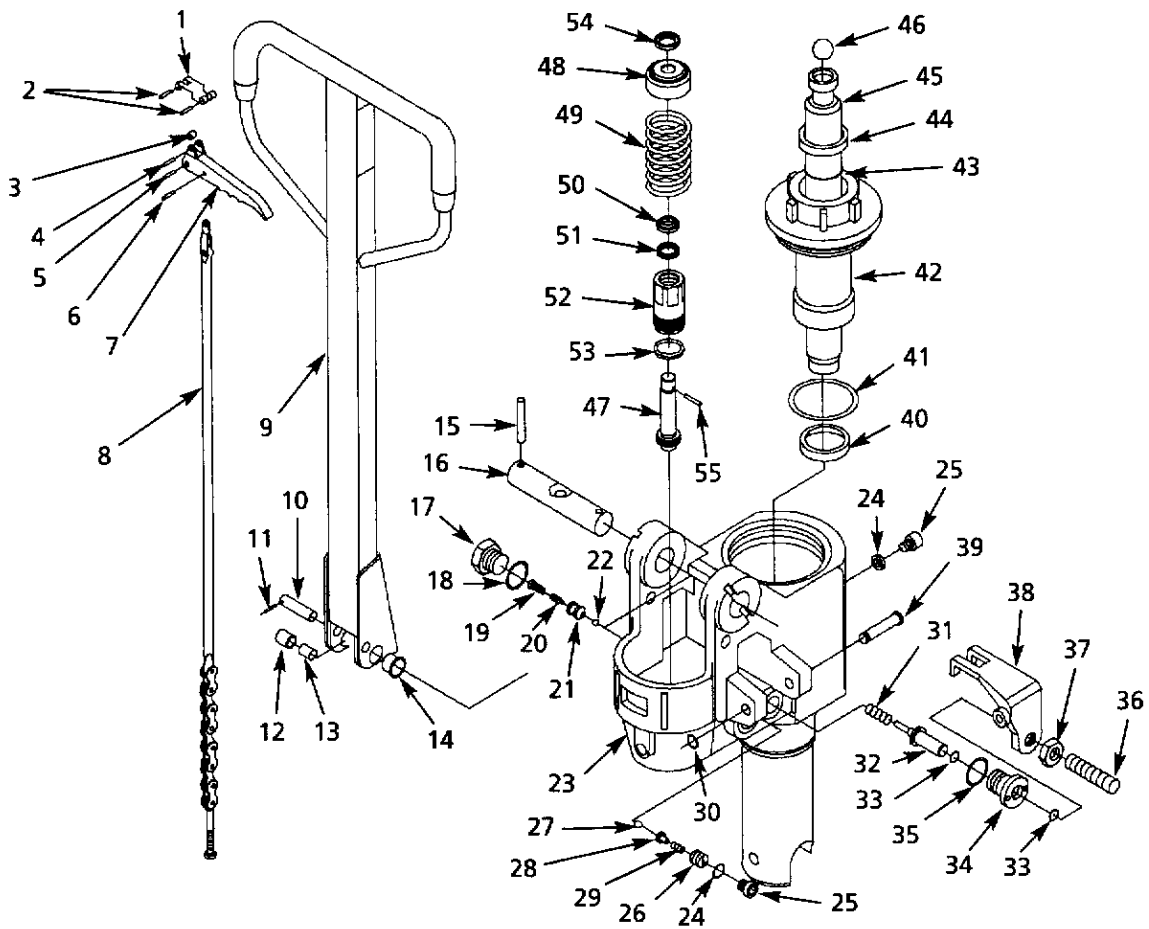
Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts
 P.O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

E
N
G
L
I
S
H



Assembly Kits

- ▲ = 1-8
- = 17-22
- = 26-29
- = 31-35
- ▼ = 40-41, 43-44
- = 47-49, 54-55
- ◆ = 50-51

Figure 7 – Repair Parts Illustration for Handle and Hydraulic Pump Assembly

Repair Parts List for Handle and Hydraulic Pump Assembly

Ref. No.	Description	Part No. for 2ZE57	Qty.	Ref. No.	Description	Part No. for 2ZE57	Qty.
Following included in Ref. No. 1 (Figure 6)				31	Spring	→	1
1	Spring plate	▲	1	32	Strike pin	→	1
2	Roll pin	▲	2	33	O-ring	→	2
3	Roller	▲	1	34	Sleeve	→	1
4	Roll pin	▲	1	35	O-ring	→	1
5	Roll pin	▲	1	36	Set screw	MH57-136G	1
6	Roll pin	▲	1	37	Nut	MH57-137G	1
7	Control lever	▲	1	38	Lowering lever	MH57-138G	1
8	Plunger	▲	1	39	Pin	MH57-139G	1
9	Handle body	MH57-109G	1	40	Seal	▼	1
10	Shaft	MH57-110G	1	41	O-ring	▼	1
11	Roll pin	MH57-111G	1	42	Cylinder cap	MH57-142G	1
12	Roller	MH57-112G	1	43	O-ring	▼	1
13	Bushing	MH57-113G	1	44	Seal	▼	1
Following included in Ref. No. 41 (Figure 6)				45	Piston rod	MH57-145G	1
14	Bushing	MH57-114G	2	46	Steel ball	MH57-146G	1
15	Roll pin	MH57-115G	2	47	Plunger	□	1
16	Handle shaft	MH57-116G	1	48	Spring cap	□	1
17	Plug	■	1	49	Spring	□	1
18	Washer	■	1	50	Seal	◆	1
19	Spring	■	1	51	Seal	◆	1
20	Valve spindle	■	1	52	Pump cylinder	MH57-152G	1
21	Valve seat	■	1	53	Washer	MH57-153G	1
22	Steel ball	■	1	54	Bowl washer	□	1
23	Pump body	MH57-123G	1	55	Pin	□	1
24	Copper washer	MH57-124G	3	Assemblies and Seal kits			
25	Screw	MH57-125G	3	▲	Up/Down control assembly	MH57-156G	1
26	Screw	●	1	■	Control valve assembly	MH57-157G	1
27	Steel ball	●	1	●	Plunger valve assembly	MH57-158G	1
28	Ball base	●	1	→	Pump valve assembly	MH57-159G	1
29	Spring	●	1	▼	Piston seal kit	MH57-160G	1
30	Snap ring	MH57-130G	1	□	Plunger assembly	MH57-161G	1
				◆	Plunger seal kit	MH57-162G	1

E
N
G
L
I
S
H

For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

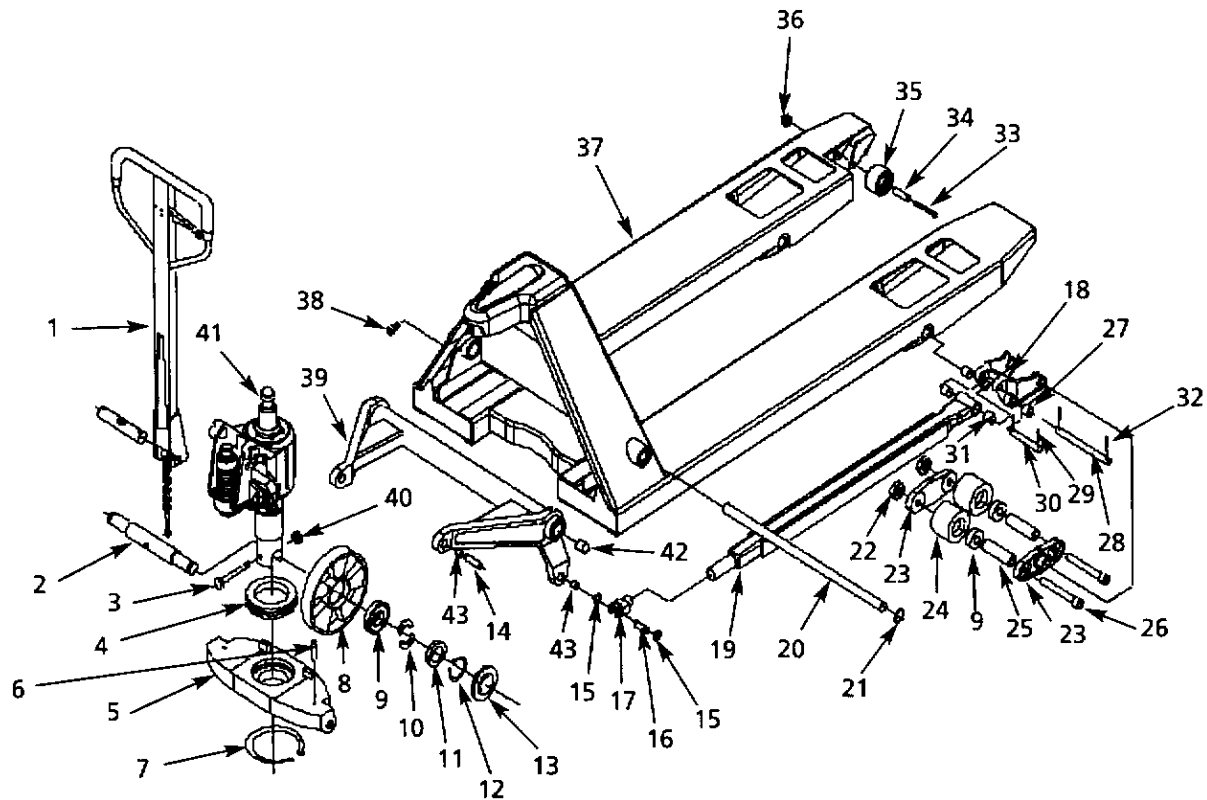
Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts
 P.O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

E
N
G
L
I
S
H



Assembly Kits

- ▲ = 8, (2)-9, 10, 11, 12, 13
- = (2)-22, (2)-23, (2)-24, (4)-9, (2)-25, (2)-26
- = 33, 34, 35, 36

Figure 8 - Repair Parts Illustration for General Assembly

Repair Parts List for General Assembly

Ref. No.	Description	Part No. for 2ZE60	Qty.	Ref. No.	Description	Part No. for 2ZE60	Qty.
1	Handle assembly (See Figure 9)	MH60-1G	1	24	Lift wheel	■	4
2	Wheel shaft	MH60-2G	1	25	Bushing	■	4
3	Bolt	MH60-3G	1	26	Bolt	■	4
4	Bearing	MH60-4G	1	27	Bushing	MH60-27G	4
5	Base	MH60-5G	1	28	Exit axle	MH60-28G	2
6	Roll pin	MH60-6G	2	29	Roll Pin	MH60-29G	4
7	Snap ring	MH60-7G	1	30	Push Pin	MH60-30G	2
8	Wheel-main	▲	2	31	Bushing	MH60-31G	4
9	Bearing	6L026,▲,■	12	32	Roll Pin	MH60-32G	4
10	Split washer	▲	2	33	Bolt	●	2
11	Washer	▲	2	34	Bushing	●	2
12	Snap ring	▲	2	35	Entry wheel	●	2
13	Wheel cap	MH60-13G,▲	2	36	Nut	●	2
14	Pin	MH60-14G	2	37	Fork base	MH60-37G	1
15	Snap ring	MH60-15G	4	38	Screw	MH60-38G	1
16	Pin	MH60-16G	2	39	Rocker arm	MH60-39G	1
17	Rod end	MH60-17G	2	40	Nut	MH60-40G	1
18	Wheel bracket	MH60-18G	2	41	Hydraulic pump (See Figure 9); page 10	MH60-41G	1
19	Push rod	MH60-19G	2	42	Bushing	MH60-42G	2
20	Rocker shaft	MH60-20G	1	43	Bushing	MH60-43G	4
21	Snap ring	MH60-21G	2	▲	Main Wheel Kit*	MH60-44G	1
22	Nut	■	4	■	Lift Wheel Kit**	MH60-45G	1
23	Nog of fork wheel	■	4	●	Entry Wheel Kit	MH60-46G	1

(*) Also available in nylon construction. Order part number MH60-47G.

(**) Also available in nylon construction. Order part number MH60-48G.

For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

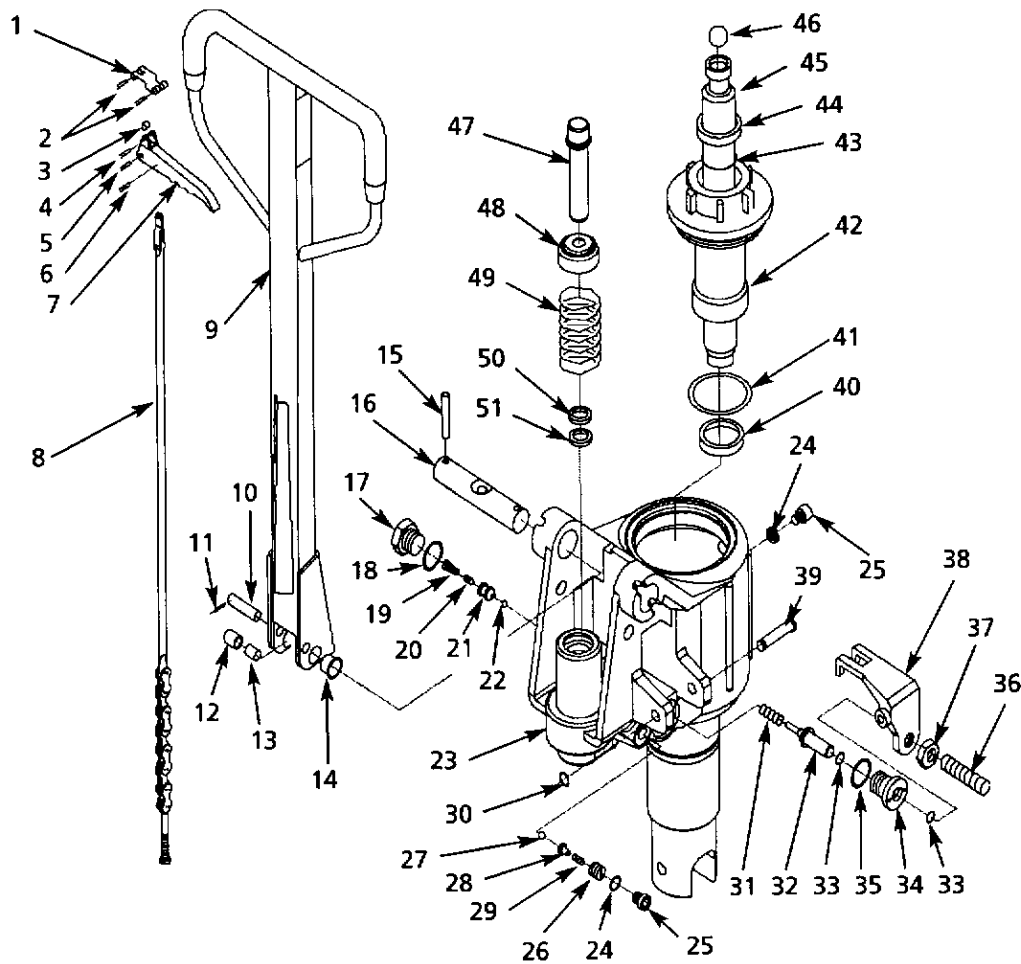
Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts
 P.O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

E
N
G
L
I
S
H



Assembly Kits

- ▲ = 1-8
- = 17-22
- ◆ = 26-29
- = 31-35
- ▼ = 40-41, 43-44
- = 47-49
- △ = 50-51

Figure 9 - Repair Parts Illustration for Handle and Hydraulic Pump Assembly

Repair Parts List for Handle and Hydraulic Pump Assembly

Ref. No.	Description	Part No. for 2ZE60	Qty.	Ref. No.	Description	Part No. for 2ZE60	Qty.
Following included in Ref. No. 1 (See Figure 8)				30	Snap ring	MH60-130G	1
1	Spring plate	▲	1	31	Spring	→	1
2	Roll pin	▲	2	32	Strike pin	→	1
3	Roller	▲	1	33	O-ring	→	2
4	Roll pin	▲	1	34	Sleeve	→	1
5	Roll pin	▲	1	35	O-ring	→	1
6	Roll pin	▲	1	36	Set screw	MH60-136G	1
7	Control lever	▲	1	37	Nut	MH60-137G	1
8	Plunger	▲	1	38	Lowering lever	MH60-138G	1
9	Handle body	MH60-109G	1	39	Pin	MH60-139G	1
10	Shaft	MH60-110G	1	40	Seal	▼	1
11	Roll pin	MH60-111G	1	41	O-ring	▼	1
12	Roller	MH60-112G	1	42	Cylinder cap	MH60-142G	1
13	Bushing	MH60-113G	1	43	O-ring	▼	1
14	Bushing	MH60-114G	2	44	Seal	▼	1
Following included in Ref. No. 41 (See Fig. 8)				45	Piston rod	MH60-145G	1
15	Roll pin	MH60-115G	2	46	Steel ball	MH60-146G	1
16	Handle shaft	MH60-116G	1	47	Plunger	□	1
17	Plug	■	1	48	Spring cap	□	1
18	Washer	■	1	49	Spring	□	1
19	Spring	■	1	50	Seal	△	1
20	Valve spindle	■	1	51	Seal	△	1
21	Valve seat	■	1	Assemblies and Seal kits			
22	Steel ball	■	1	▲	Up/Down control assembly	MH60-152G	1
23	Pump body	MH60-123G	1	■	Control valve assembly	MH60-153G	1
24	Copper washer	MH60-124G	3	◆	Plunger valve assembly	MH60-154G	1
25	Screw	MH60-125G	3	→	Pump valve assembly	MH60-155G	1
26	Screw	◆	1	▼	Piston seal kit	MH60-156G	1
27	Steel ball	◆	1	□	Plunger assembly	MH60-157G	1
28	Ball base	◆	1	△	Plunger seal kit	MH60-158G	1
29	Spring	◆	1				

E
N
G
L
I
S
H

Dayton® Hydraulic Hand Pallet Trucks

E
N
G
L
I
S
H

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Forks will not rise when handle is pumped	<ol style="list-style-type: none"> Control lever is not in the RAISE or "down" position Air has entered the hydraulic system Up/Down control assembly out of adjustment Up/Down control assembly broken Low oil level Pump valve assembly has failed Worn or damaged seals (oil leak will be evident) 	<ol style="list-style-type: none"> Move control lever into the RAISE or "down" position and pump handle Bleed air from system, see "Handle Assembly" section Adjust lock nut where plunger (8) attaches to lowering lever (38), see Figures 7 and 9 Order new Up/Down control assembly. See pump detail assembly parts list for part numbers Add hydraulic oil, see "Maintenance" section Order replacement pump valve assembly Order replacement seal group(s)
Forks descend quickly after elevating	Lowering out of adjustment	Adjust lowering lever set screw, see page 2 for "Fork Adjustment" section
Forks rise when control lever is in the NEUTRAL or "center" position	<ol style="list-style-type: none"> Control lever is not in Neutral or center position Neutral position adjustment required 	<ol style="list-style-type: none"> Move control lever into the NEUTRAL or "center" position See "Fork Adjustment" section for procedure
Forks cannot be lowered to the minimum height	<ol style="list-style-type: none"> Too much hydraulic oil Push rods damaged 	<ol style="list-style-type: none"> Drain small amount of hydraulic oil and retry. See "Adding Hydraulic Oil" section for drain plug location Replace push rods
Pallet Truck is difficult to roll	Pneumatic wheels, being softer, give more resistance than nylon wheels and may be difficult to roll on some floor types	Order nylon wheel kits. See general assembly parts lists for part numbers

LIMITED WARRANTY

DAYTON LIMITED TWO-YEAR WARRANTY. Frame and mechanical components for models covered in manual are warranted by Dayton Electric Mfg. Co., (Dayton) to the original user against defects in workmanship or material under normal use for 2 years from the date of purchase. Hydraulic unit is warranted for 3 years on 2ZE60 and 5 years on 2ZE57. Warranty does not cover usage in cold storage, brine corrosive or similar application.

DAYTON 90-DAY LIMITED WARRANTY. Wheels, bearings and bushings for Models 2ZE57, 2ZE60 are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for 90 days after the date of purchase. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

WARRANTY DISCLAIMER. Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABILITY, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions. Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

PRODUCT SUITABILITY. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Dayton attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequentially the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMPT DISPOSITION. Dayton will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.

Manufactured for Dayton Electric Mfg. Co.
Niles, Illinois 60714 U.S.A.

Dayton®