

INSTRUCTION MANUAL

ALL TERRAIN PALLET TRUCK

HAND PALLET TRUCK



WARNING !

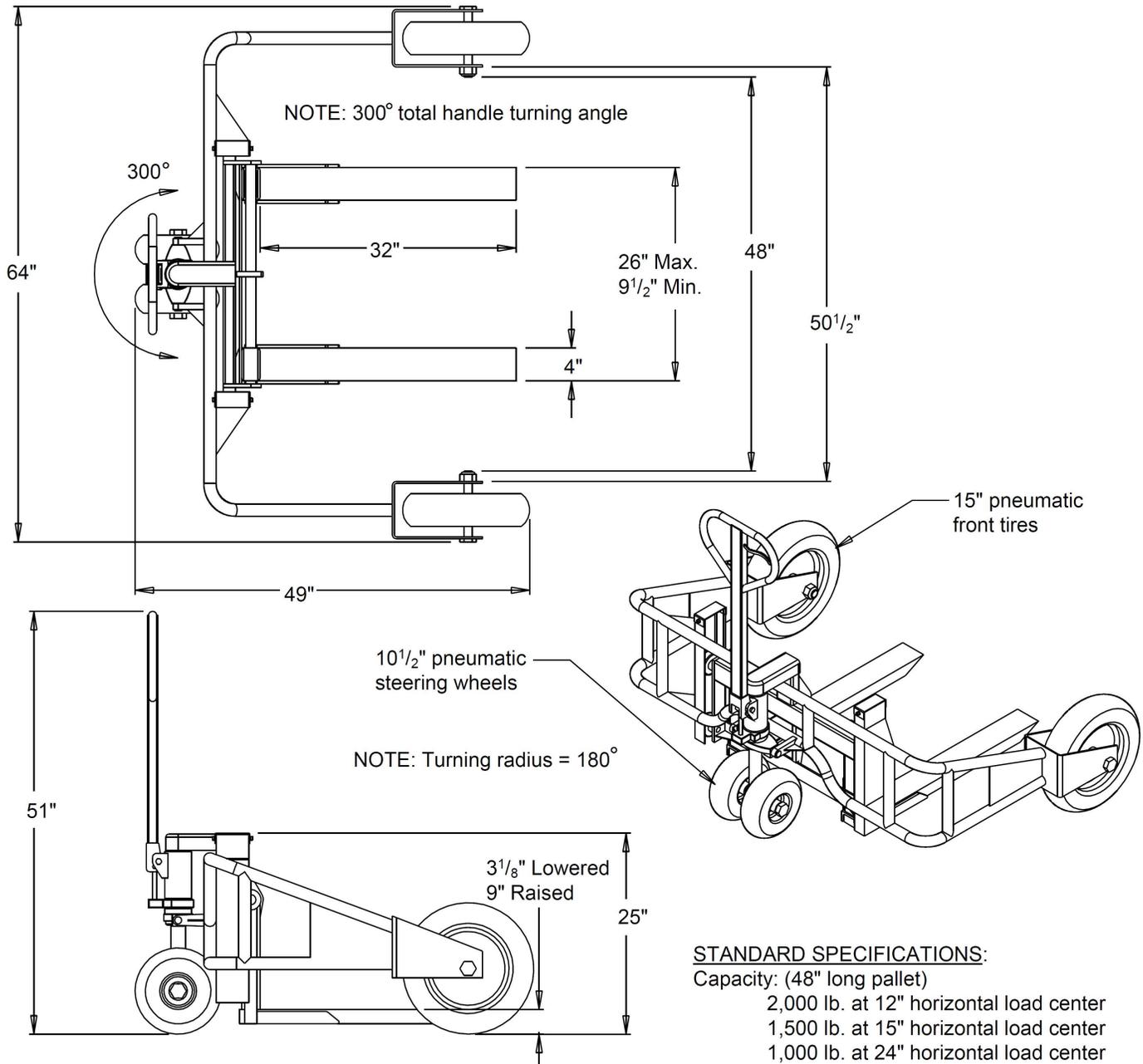
1. Read and understand instruction manual before using the pallet truck.
2. Do not place hands or feet under the pallet truck at any time.
3. Do not operate loaded pallet truck on ramps or inclines.
4. Do not tip loaded pallet truck forks. This may cause damage to the forks and personal injury if the rear of the pallet truck suddenly “pops up”.
5. Never leave a loaded pallet truck unattended in the raised position.
6. Do not load pallet truck beyond its rated capacity.
7. Secure load before transporting.
8. To prevent accidental tipping, make sure load is centered on the forks.
9. Do not move a loaded pallet truck by other than manual force.
10. Failure to comply with these warnings may result in personal injury and/or property damage.

NOTE: Materials, design, and specifications are subject to change without notice.

Introduction

Thank you for purchasing an ALL-T-2 manual pallet truck. This pallet truck was designed to traverse rough terrain where no ordinary pallet truck can go and is adapted for use in settings such as garden nurseries, construction sites, and marinas. The truck features a high quality hydraulic pump with welded construction and chrome plated piston and pump plunger ensure durability and corrosion resistance. All the joints are fitted with seals to ensure sealing and keep the body from oil leaking. Safety by-pass valve helps protect against overload. 3-position control handle allows operator to lower, raise and engage pump into neutral position with a simple touch of the lever. Strong & light tubular steel framing and adjustable fork width. Large pneumatic tires make handling pallets of most sizes possible without the need for a forklift.

Specifications



Overall width	= 63 3/4"	Fork length	= 32"
Overall length	= 49"	Fork lowered height	= 3 1/8"
Overall height	= 51"	Fork raised height	= 9"
Overall fork width	= 9 1/2" to 26"	Fork width	= 4"
		Straddle inner diameter	= 50 1/2"

Safety Instructions

1. Keep feet out from underneath load.
2. Make sure load will not fall or tip before moving.
3. Do not operate loaded pallet truck on ramps or inclines.
4. Keep the load centered on the pallet.
5. Do not load pallet truck beyond rated capacity.
6. Always wear appropriate safety shoes.

Operating Pallet Truck

Pallet Truck Operation

To raise the forks, place handle in the UP position (bottom part of the handle slot), see Fig. 1.

To lower forks, pull lever handle to DOWN position (upper part of the slot).

To freely move the handle, set the lever in Neutral (center notch of slot).

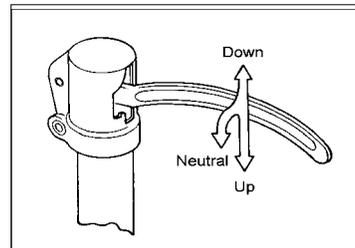


Fig. 1

To Lift a Load

1. Lower forks to lowest position, Figure 1.
2. Insert forks under load, or into pallet.
3. Place lever in UP position (bottom part of slot), Figure 1.
4. Move handle up, and down until forks reach desired height.

To Move a Load

1. Place lever in NEUTRAL position (center notch of slot), Figure 1.
2. Pull or push pallet truck to desired location.

To Lower a Load

1. Pull lever to the DOWN position (upper part of slot), Figure 1.
2. Pull forks away from load.

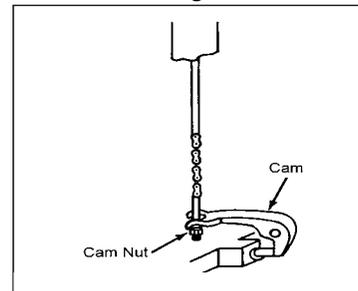


Fig. 2

Up-Down Cam Adjustment

1. Set the lever in the NEUTRAL position, Figure 1.
2. Turn the cam nut while pumping the handle, Figure 2.
3. When lifting stops, give the nut one more turn.
4. The cam nut is properly adjusted when pumping the handle in the NEUTRAL position causes no movement of the hydraulic ram.

Cleaning the Release Valve (Bleed the Pump)

Over time, the hydraulic pump assembly may become clogged with debris, air bubbles, and not function properly.

To clean the release valve and bleed the pump:

1. Pump handle quickly, raising pallet truck to full extent. While continuing pumping action, pull lever to down position.
2. When forks reach total down position, valve is flushed. Repeat if necessary.

Lubrication

Check the oil level annually by removing the oil plug found on the top of the pump housing. When changing or adding oil, fill the tank through the oil plug screw hole to 80% capacity with hydraulic jack oil, about 2" deep in pump housing, see Figure 3.

Do not use any other type of oil.

There is one grease fitting (#55B in the breakdown) located on the table. Lubricate this point on a semi-annual basis.

Wheel bearings are sealed and require no lubrication. Crank Shaft features oil light bushings that also require no lubrication. Lightly oil all moving parts.

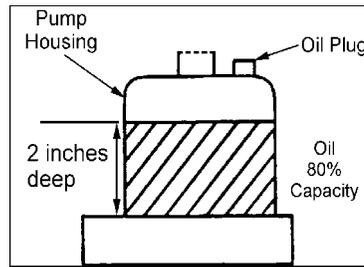


Fig. 3

Cleaning Relief Valve

Over time, relief valve may become clogged with debris and will not work properly. To clean relief valve, flush out hydraulic system as follows:

Pump handle quickly, raising pallet truck to full extent and then quickly release pumping action.

Lubricating and Oiling

When changing or adding oil, fill tank to 80% capacity (Figure 3) with hydraulic oil, such as: Shell Tellus Oil-----No. 22 or 27, Turbine Oil-----No. 22, Texaco Regal-----No. 32. Change grease of rear and front wheels annually.

Troubleshooting

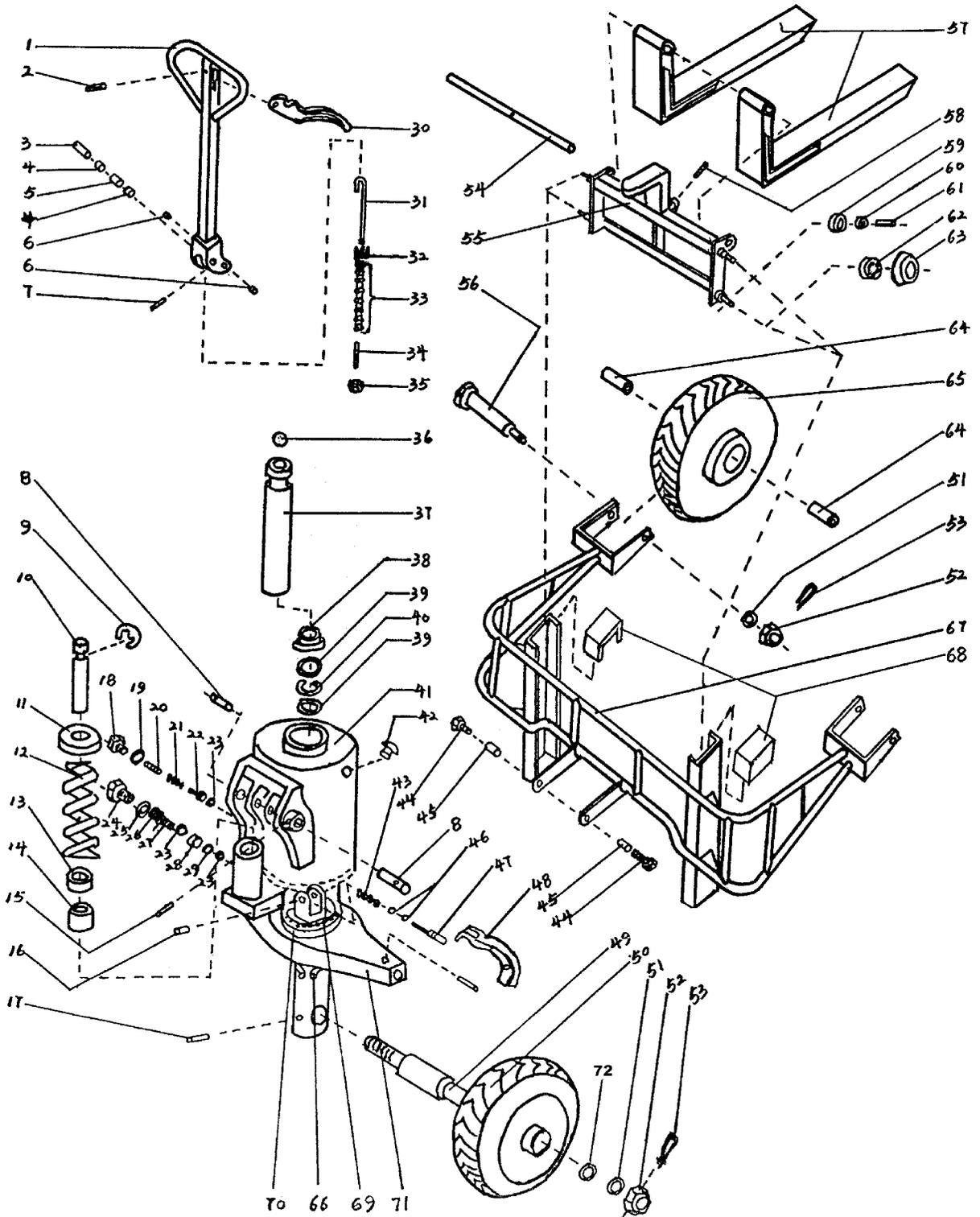
Possible problems could arise in the operation of your hydraulic pallet truck. Their probable cause(s) and corrective action(s) follow:

Condition	Probable Cause	Corrective Action
Hydraulic unit does not lift.	Oil low in tank. Steel ball not seated in hydraulic unit. Worn O-ring in ram cylinder	Make sure there is no oil leakage from valve, and add oil. See "Cleaning Relief Valve" in this manual. Consult authorized repair station.
Once lifted, truck lowers by itself.	Steel ball not seated in hydraulic unit Worn O-ring in ram cylinder Relief valve not seated properly Relief valve not adjusted properly Oil leakage from each valve	See "Cleaning Relief Valve" in this manual. See "Cleaning Relief Valve" in this manual. See "Cleaning Relief Valve" in this manual. Reload truck within load capacity, and adjust valve by pressure adjustment screw. Tighten plug of each valve.
Fork does not lower.	Cam broken Up-down cam nut out of adjustment Broken fork rods and linkage	Replace cam chain. Refer to "Adjust Up-down Cam" in this manual. Replace broken parts.
Lever does not set at NEUTRAL position.	Up-down cam nut out of adjustment	Refer to "Adjusting Up-down Cam" in this manual

Spare Parts List

PART NO.	DESCRIPTION	PART	DESCRIPTION
001	Handle	037	Ram Piston
002	Spring	038	Dust Seal
003	Roller Pin	039	O-ring 29.85x3.5
004	Bushing 1615	040	Back-Up Ring
005	Roller	041	Pump Housing Assembly
006	Bushing 1615	042	Oil Plug
007	Spring Pin 3x28	043	Spring
008	Handle Pin	044	Table Pin
009	E-ring 15	045	Bushing 1620
010	Plunger Piston	046	O-ring 4.8x1.9
011	Spring Cap	047	Release Nozzle
012	Spring	048	Cam
013	Dust Seal	049	Wheel Shaft
014	U-ring 18x24x8	050	Wheel
015	Spring Pin 3x28	051	Washer 16
016	Spring Pin 8x25	052	Nut M16
017	Spring Pin 8x45	053	Split Pin 4x30
018	Relief Plug	054	Shaft
019	O-ring 11.2x2.4	055	Mounting Plate
020	Pressure Adjust Screw	056	Shaft
021	Spring	057	Fork
022	Spring Base	058	Screw M6x35
023	Steel Ball 6	059	Guide Roller
024	Release Plug	060	Bushing 0808
025	Washer	061	Guide Roller Axle
026	Spring	062	Bearing 6206-Z
027	Spring	063	Rolling Axle Cover
028	Valve	064	Washer
029	Steel Ball 9	065	Front Wheel
030	Lever	066	Snap Ring 44
031	Release Rod	067	Master
032	Chain Joint	068	Dust Cover
033	Chain	069	Bearing Base
034	Anchor Bolt	070	Bearing 51109-Z
035	V-Nut M6	071	Table
036	Steel Ball 14	072	Bearing Seal

EXPLODED VIEW OF CHPT CONSTRUCTION HAND PALLET TRUCK



Attaching the Tow Bar (ALL-TTB) to ALL-T-series Lift Trucks

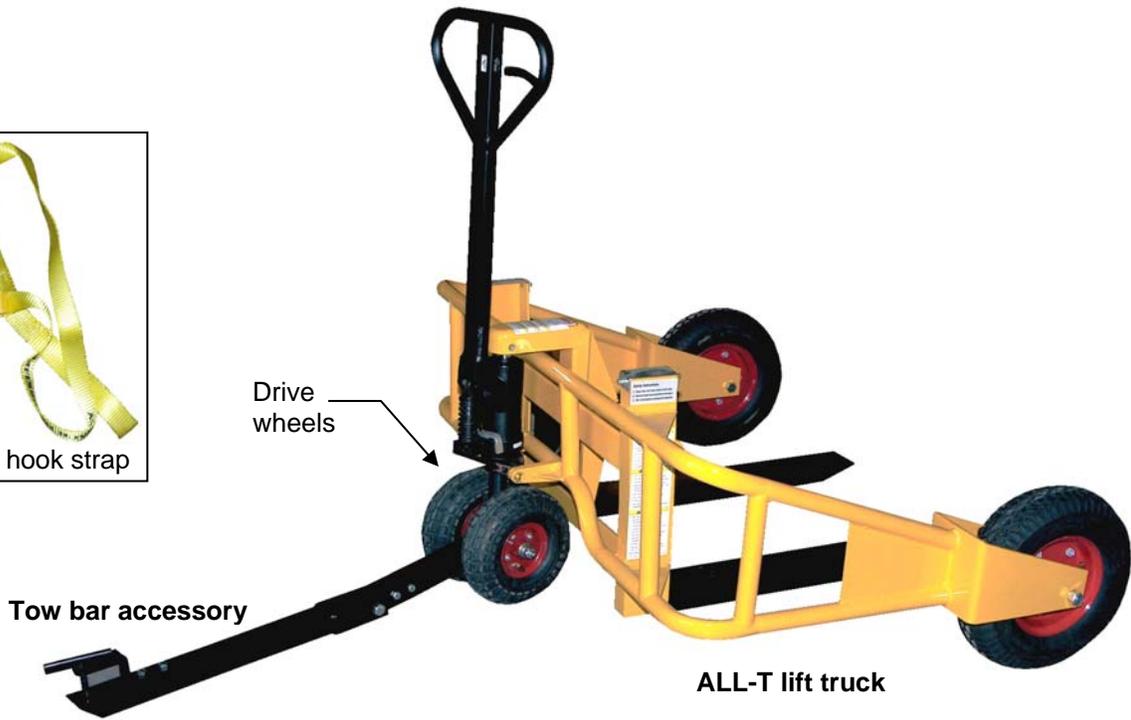


FIG. 1: Front View of Fully Assembled Shed & Parts List

Item no.	Description	Quantity
1	7/16in. – 14 x 2.5in. bolt	2
2	5/8in. – 11 x 3.5in. bolt	1
3	1/2in. – 13 x 1in.	2
4	7/16in. – 14 nylock nut	2
5	5/8in. – 11 nylock nut	1
6	1/2in. – 13 nylock nut	2
7	1/4in. – 20 x 3in. bolt	2
8	1/4in. – 20 nylock nut	2

Step 1: Remove the drive wheels to expose the wheel shaft.

A

Remove the lug nut and lock washer that fastens each drive wheel to the wheel shaft.

B

steering shaft

wheel shaft

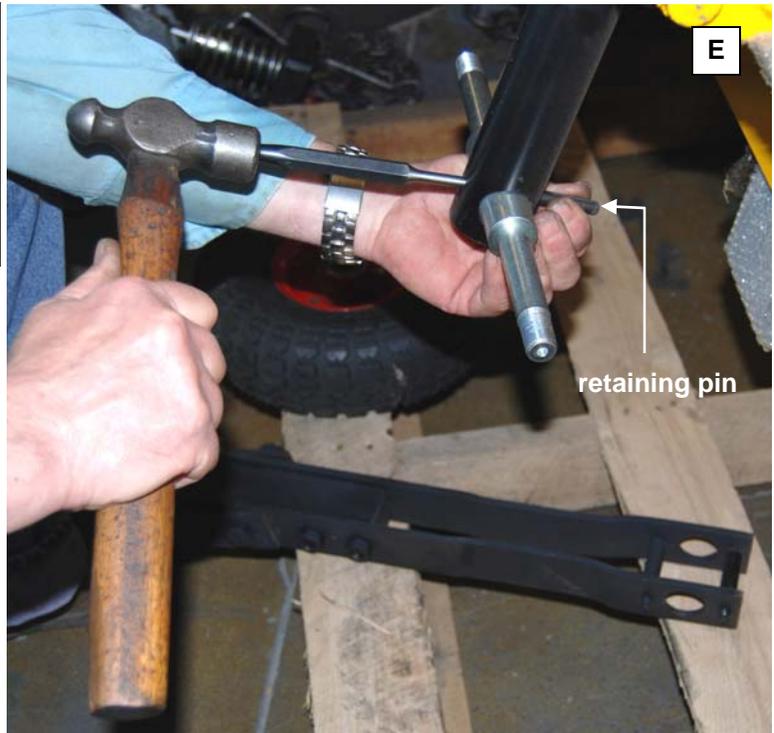
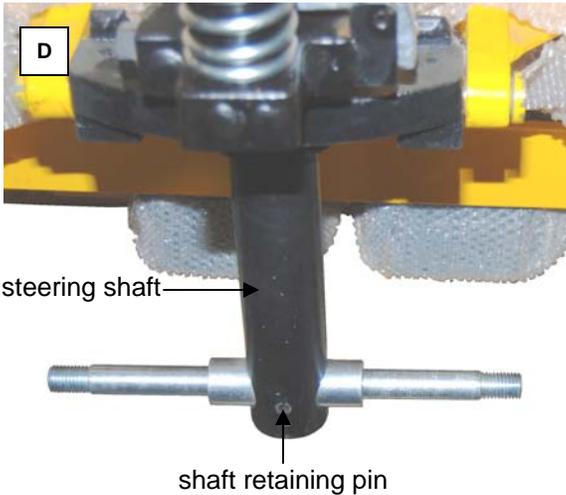
C

Slide the wheels off of the wheel shaft.

Step 2: Locate the shaft retaining pin; then remove it.

D. Locate the wheel shaft retaining pin, which is identified with an arrow in photo D at left. The retaining pin fixes the wheel shaft in place, so that it cannot rotate or slide.

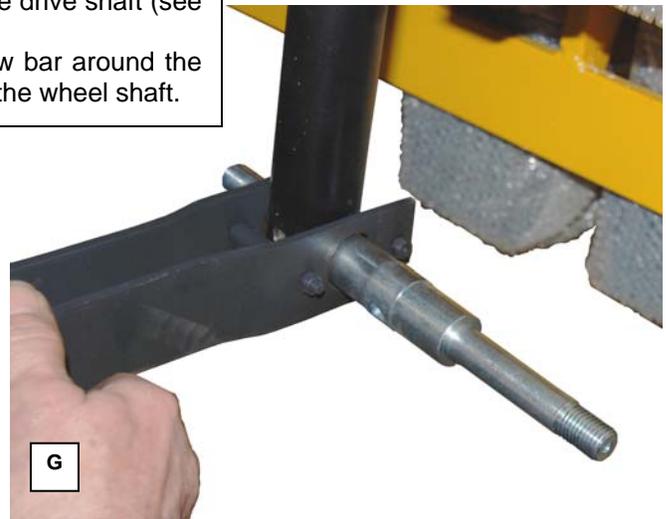
E. Before the wheel shaft can be removed, the retaining pin must be removed. Tap the retaining pin out of its channel as shown in photo E.



Step 3: Remove the wheel shaft, position the tow bar around the steering shaft and then reinstall the wheel shaft.

F. Tap and pull the wheel shaft out of its channel through the drive shaft (see photo A below).

G. Position the connection end (see Fig. 1, p. 1) of the tow bar around the steering shaft and align all of the shaft openings; then insert the wheel shaft.



Step 4: Remove the cross-link that connects the two sides of the tow bar with a flat blade screwdriver and a 1/4in.crescent wrench



I. Remove the bolt and nut that fix the cross-link in place, and then remove the cross-link.



Step 5: Fix the wheel shaft in place.



J. Rotate the wheel shaft until the hole for the retaining pin aligns with the opening in the steering shaft; then tap the retaining pin into place.
K. Reinstall the cross-link and tighten the fasteners.



Step 6: Reconnect the wheels to the wheel shaft, by reversing the procedure described in Step 1 on p. 1.

Step 7: For storage purposes, a nylon strap is included in the tow bar accessory kit. Photos L and M below indicate *one* possible method of using the strap to secure the tow bar in an upright (storage) orientation.

