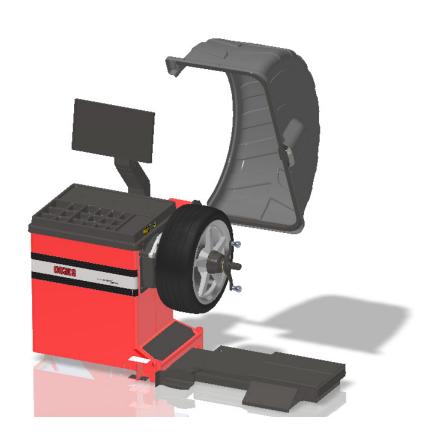
525 Light Duty Tire Lift For Use With COATS Direct Drive Series Wheel Balancers



Safety Instructions Setup Instructions Operating Instructions Maintenance Instructions with Parts Identification

READ these instructions before placing unit in service. KEEP these and other materials delivered with the unit in a binder near the machine for ease of reference by supervisors and operators.

Manual Part No.: 85611991 00

12/20

Revision:





Read entire manual before assembling, installing, operating, or servicing this equipment.

Safety Instructions

Safety Notices and Decals



Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property. Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual. For additional copies of either, or further information, contact:

Hennessy Industries LLC

1601 J.P. Hennessy Drive LaVergne, TN 37086-3565 (615) 641-7533 or (800) 688-6359 www.hennessyind.com

Definitions of Hazard Levels

Identify the hazard levels used in this manual with the following definitions and signal words:

DANGER

Watch for this symbol:



It Means: Immediate hazards, which will result in severe personal injury or death.

WARNING

Watch for this symbol:



It Means: Hazards or unsafe practices, which could result in severe personal injury or death.

CAUTION

Watch for this symbol:



It Means: Hazards or unsafe practices, which may result in minor personal injury or product or property damage.



Watch for this symbol! It means BE ALERT! Your safety, or the safety of others, is involved!

IMPORTANT SAFETY INSTRUCTIONS

- Read and understand this manual and all onmachine labels before operating this equipment. Abuse and misuse will shorten the functional life.
- 2. Do not operate equipment if the equipment has been dropped or damaged until a qualified service technician has examined it.
- **3.** Keep hair, loose clothing, fingers and all other body parts away from moving parts.
- **4.** Use only as described in this manual. Use only manufacturer's recommended attachments.
- ALWAYS WEAR SAFETY GLASSES. Everyday glasses only have impact resistant lenses; they are NOT safety glasses.
- **6.** Keep guards and safety features in place and in working order.
- 7. Wear proper clothing. Safety toe, non-slip footwear and protective hair covering to contain hair are recommended. Do not wear jewelry, loose clothing, neckties when operating the tire lift.
- **8.** Keep work area clean and well lighted. Cluttered and/or dark areas invite accidents.
- **9.** Repair or replace any part that is damaged or worn and that may cause unsafe operation.
- 10. Never overload or stand on the tire lift.
- **11.** Do not allow untrained persons to operate machinery.
- **12.** Disconnect lift from air source and activate valve in both directions to ensure stored air is bled to atmosphere before servicing.

SAVETHESE INSTRUCTIONS

Operator Protective Equipment

Personal protective equipment helps make tire servicing safer. However, equipment does not take the place of safe operating practices. Always wear durable work clothing during tire service activity. Loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect operator's hands when handling worn tires and wheels. Sturdy leather work shoes with steel toes and oil resistant soles should be used by tire service personnel to help prevent injury in typical shop activities. Eve protection is essential during tire service activity. Safety glasses with side shields, goggles, or face shields are acceptable. Back belts provide support during lifting activities and are also helpful in providing operator protection. Consideration should also be given to the use of hearing protection if tire service activity is performed in an enclosed area, or if noise levels are high.

Owner's Responsibility

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

- Follow all installation instructions.
- Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes.
- Carefully check the unit for correct initial function.
- Read and follow the safety instructions. Keep them readily available for machine operators.
- Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.
- Allow unit operation only with all parts in place and operating safely.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with authorized or approved replacement parts.
- Keep all instructions permanently with the unit and all decals/labels/notices on the unit clean and visible.
- Do not override safety features.

Introduction

When attached to a Coats® wheel balancer, use the Coats 525 Light Duty Tire Lift to position wheel assemblies for mounting on the balancer stub shaft. Any other use is improper. Before beginning any kind of work on or with this machine, carefully read and understand the contents of these operating instructions. Keep this manual near the machine and consult it as needed during operations.

Specifications

Working Pressure	120-150 PSI
Maximum Wheel Diameter	44 inches
Maximum Wheel Weight	160 lbs.
Tire Lift Weight	140 lbs.

Before you Begin

The shipment should be thoroughly inspected as soon as it is received. The signed bill of lading is acknowledgement by the carrier of receipt in good conditions of the shipment covered by our invoice. If any of the goods called for on this bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods. Do this for your own protection.

NOTIFY THE CARRIER AT ONCE if any hidden loss or damage is discovered after receipt and ask the carrier to make an inspection. If the carrier will not do so, prepare a signed statement to the effect that you have notified the carrier (on a specific date) and that the carrier has failed to comply with your request.

IT IS DIFFICULT TO COLLECT FOR LOSS OR DAMAGE AFTER YOU HAVE GIVEN THE CARRIER A CLEAR RECEIPT.

File your claim with the carrier promptly. Support your claim with copies of the bill of lading, freight bill, invoice, and photographs, if available.

Although COATS responsibility ceases upon delivery of the shipment to the carrier, we will gladly assist in tracing lost shipments. Our willingness to assist in every possible manner does not make COATS responsible for collection of claims or replacement of lost or damaged materials. Shipping damage claims will not be handled under warranty.

Transport

Overall Packing Size	44	Χ	25	Χ	11	inches
Gross Weight (Tire Li	ft on Pallet)				185	lbs.

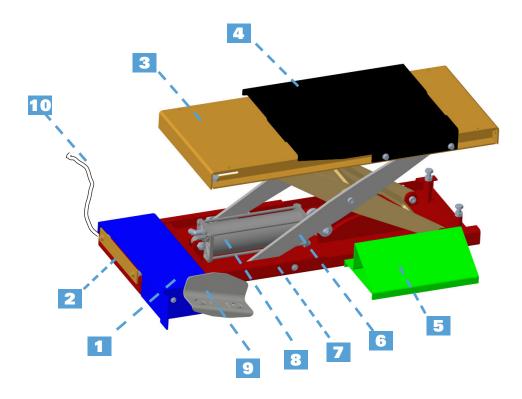
Unpacking

Once the packing material has been removed, check the unit visually for any signs of damage. Remove the shipping bolts that secure the unit to the pallet.



Figure 1 - Packaged Unit

Principal Operating Parts (Lift P/N: 800525)



- VALVE BOX Supports toggle pedal to raise / lower the WHEEL TRAY and holds valve
- BACK PLATE ASSY To clamp the Lift and Balancer together and bolt the BOTTOM BASETRACK to Wheel Balancer via this BACK PLATE ASSY.
- **TOP TRACK** A TRACK that supports and guides the WHEEL TRAY
- WHEEL TRAY Holds tire/wheel assembly. Use to load or unload a tire/wheel assembly to or from the 525Tire Lift.
- **WHEEL RAMP** Use to load or unload a tire/ wheel assembly to or from the 525 Tire Lift.
- **SCISSOR FEATURE** Use to raise/lower the TOP TRACK

- BASE TRACK A TRACK that holds the SCIS-SOR ASSEMBLY and CYLINDER, also supplies connection to Wheel Balancer.
- **CYLINDER** To supply power to drive scissor open/close in order to raise / lower the WHEEL TRAY.
- PEDAL Actuate toggle pedal right/left. to raise / lower the WHEEL CARRIER/TRAY.
- **INLET LEADER HOSE** used to attach the Lift to an air source.Customer suppliers the proper fitting for their air system.

Installation

Pneumatic Connection

Connect air intake to a compressed air system with a working pressure of 120-150 PSI. Use a compressed air hose with an inside diameter of 1/4" - 3/8".



Make sure air hose is free of the BASE TRACK area. If the air hose is damaged, the Tire Lift may descend unexpectedly.

Assembly Instructions

Tools Required:

- Marker
- Tape or Ruler
- 13-mm Socket
- 13-mm Spanner
- 3/8-in Socket
- Ratchet
- Claw Hammer
- Customer supplied fitting

525 Light Duty Tire Lift Components:

- PEDAL BOX ASSY (1,9)
- BACK PLATE ASSY (2)
- LIFT ASSY (3,4,6,7,8)
- WHEEL RAMP (5)
- **1.** Position unit by the wheel balancer; unpack the box as (fig 2) shown, and remove all side walls



Figure 2 - Unpack the box remove all side walls.

2. Remove 2 screws as (fig 3) shown, then slide the PEDAL BOX ASSY along the direction as the arrow showing to disenagage from the BASE TRACK. Put it aside, and then put WHEEL RAMP aside for later use.

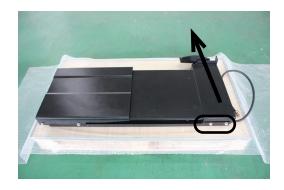


Figure 3 - Remove 2 screws and slide the PEDAL BOX ASSY as shown by arrow.

3. Remove 2 screws (fig 4) and move LIFT ASSY below the Balancer stub shaft.

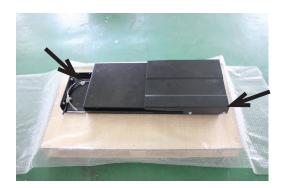


Figure 4 - 2 screws

4. Slide LIFT ASSY so the BASE TRACK is up against the wheel balancer chassis; below the stub shaft. With the aid of a tape measure, place the BASE TRACK 2.8-inches from the balancer edge as shown (fig 5)



Figure 5 - Position LIFT ASSY against Wheel Balancer

5. Loosen the 2 bolts, lift the BACK PLATE upward until the bolt is against the chassis edge(fig 6), and then tighten the bolts.



Figure 6 - Loosen the bolts and move BACK PLATE upward against the chassis edge, then tighten them.

6. Place PEDAL BOX ASSY to the right orientation as (fig 7) shown and connect tubes by color, (black tube to black fitting and clear tube to the plain plated fitting).

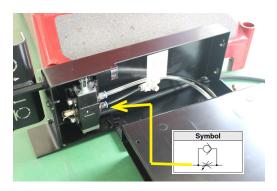


Figure 7 - Connect tubes

7. Lay PEDAL BOX ASSY between chassis and the LIFT ASSY, Route the INLET LEADER HOSE out of the rear corner. Slide the PEDAL BOX ASSY back against the rear wall of the BASETRACK as shown (fig 8), tighen the (2) bolts.



Figure 8 - Bolt PEDAL BOX ASSY to BASETRACK

8. Remove the bolt to let WHEEL TRAY move free (fig 9)



Figure 9 - Remove the bolt

9. Insert rear WHEEL RAMP lip into the slot of BASE TRACK (fig 10).

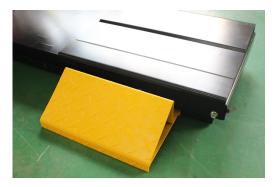


Figure 10 - Setup RAMP

10. Prepare the hose fitting 1/4-NPT (NOT SUP-PLIED) for connection to the main air supply (fig 11).



Figure 11 - Prepare the fitting [Customer-supplied]

11. Connect to air supply. Actuate VALVE PEDAL to and move the WHEELTRAY up and down two or three times with the WHEELTRAY unloaded.

Important: It is normal if the Tire Lift jumps 2 or 3 inches the first time it lifts after air has been applied.

Operation



ALWAYS make sure the 525 Tire Lift is not touching the wheel assembly before using the wheel balancer. Personal injury or damage to the unit could result if neglected.



ALWAYS make sure to hold the wheel assy UPRIGHT any time the wheel/tyre assembly is on the WHEEL TRAY. Personal injury or damage to the unit could result if neglected. Do not leave WHEEL Lift in raised position and in contact WITH WHEEL before initiating Wheel Balancing cycle



Before moving the WHEELTRAY, make sure the BASETRACK area is clear of debris.

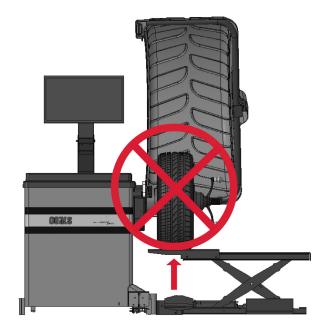
525 Light Duty Lift Operation

- **1.** Actuate the PEDAL to lower; making sure the WHEEL CARRIER/TRAY is completely lowered before loading.
- **2.** Use foot to slide the WHEEL TRAY to align with the WHEEL RAMP.
- **3.** Roll the wheel assembly to load it onto the WHEELTRAY.
- **4.** Actuate the PEDAL to raise the wheel assembly; centering it with the balancer stub shaft.
- **5.** Hold the wheel assembly upright while sliding the WHEEL TRAY left until the wheel assembly is on the balancer stub shaft, ready to be mounted on the balancer.
- **6.** Secure the wheel to the balancer using suitable mounting adapters.
- **7.** Actuate the PEDAL to fully lower the WHEEL TRAY/CARRIER, ensuring the WHEEL TRAY clears the balancer chassis during movement.
- 8. Balance the wheel.
- **9.** Loosen and remove the hubnut, and any accessories blocking the removal of the wheel assembly.
- **10.** Actuate the PEDAL to raise the WHEEL TRAY/ CARRIER.

11. Move the WHEEL TRAY left under the wheel assembly.



 Do not activate the lift when the tire/wheel assembly is rigidly attached. Ensure the lift does not apply any lifting force on the balancer shaft.



- Damage can occur to the balancer and the balancer can be lifted off its original position.
- **12.** Actuate the PEDAL so the WHEEL TRAY will support the wheel assembly as it lifts.
- **13.** Remove the wheel assembly from the balancer stub shaft.
- **14.** Hold the wheel assembly upright and slide the WHEELTRAY back away from the balancer.
 - **15.** Actuate the PEDAL to lower the WHEEL.
- **16.** Unload the wheel assembly by rolling it out of the WHEEL TRAY.

Routine Maintenance

The Coats 525 Tire Lift requires minimal maintenance to ensure correct functional performance and smooth operation. Keep the BASE TRACK area that the CARRIAGE slides on clean and clear of debris. Wheel weights, debris, and hand tools can get caught between the track.



Pinch Point - Use Caution when cleaning track area of debris.

Parts Identification

Item		Part No.	Description	Item		Part No.	Description
1		8000376	ELL 90° 1/4 Hose Fitting	45		85611931	Washer,M6
2		8000378	1/4" Brass St. Fitting	46		85612032	Plate
3		8105615	1/4" NPT Muffler	47	*	NA	Tie
4		8106301	1/4" Hex Hd Self Tap Screw,		*	85612072	Cylinder, SVC, Kits
5		8182001	Screw,SHCS 10-24x3/4				•
6		85000088	Elbow-90° 1/8 NPTx8mm				
7		85606917	Washer-Flat				
8		85606919	Retaining ring				
9		85606977	Screw-SHCS M5-0.8x16mm	A	*	8x5mm,P	Plastic Tube, Black
10		85607170	Fitting P-T-C, 1/4NPTx8mm	В	*	8x5mm,P	Plastic Tube, Clear
11		85607346	Screw,flange	G	*		Rubber Hose
12		85607362	Screw,flange				
13		85607648	Bolt-HHCS		* *	8099993	8x5mm,Plastic Tube,Black
14		85608816	Nut, nylonlock M12x1.75		* *		8x5mm,Plastic Tube,Clear
15		85608892	Nut, nylonlock M10x1.75		* *		1/4,Black Rubber Hose
16		85609275	Screw,SHCS,M8X1.25-20				. ,
17		85609466	Nut-Hex,M12x1.75				
18		85610688	Clamp, 13mm	* N	ot Sh	own	
19		85611042	Orifice			bing/Hose sto	ock
20		85611651	Bearing,698-2Z			Available	
21		85611652	Shaft bearing	NS =	Non-	-stocking	
22		85611655	Guiding block			Ü	
23	NS	85611658	Base track, weldment				
24		85611665	Screw, Shoulder, 12mmx30mm				
25		85611667	Ramp				
26		85611672	Cylinder,80mm				
27	NS	85611680	Top track, weldment				
28	NS	85611682	Plate, scissor weldment				
29		85611684	Carrier, wheel				
30		85611689	Valve				
31	NS	85611690	Bracket, weldment				
32		85611698	Lever				
33	NS	85611699	Pedal weldment				
34		85611700	Bolt-HHCS,M12-1.75x55mm				
35		85611705	Shift				
36		85611708	Bolt, Shoulder, 12mmx25mm				
37		8561713	Bolt, Shoulder, 10mmx10mm				
38		85611714	Fence				
39		85611715	Plate				
40		85611720	Plate				
41		85611721	Bearing,6301 E-2RS				
42		85611764	Scissor ASSY				
43		85611896	Bushing				
44		85611930	Fitting				

