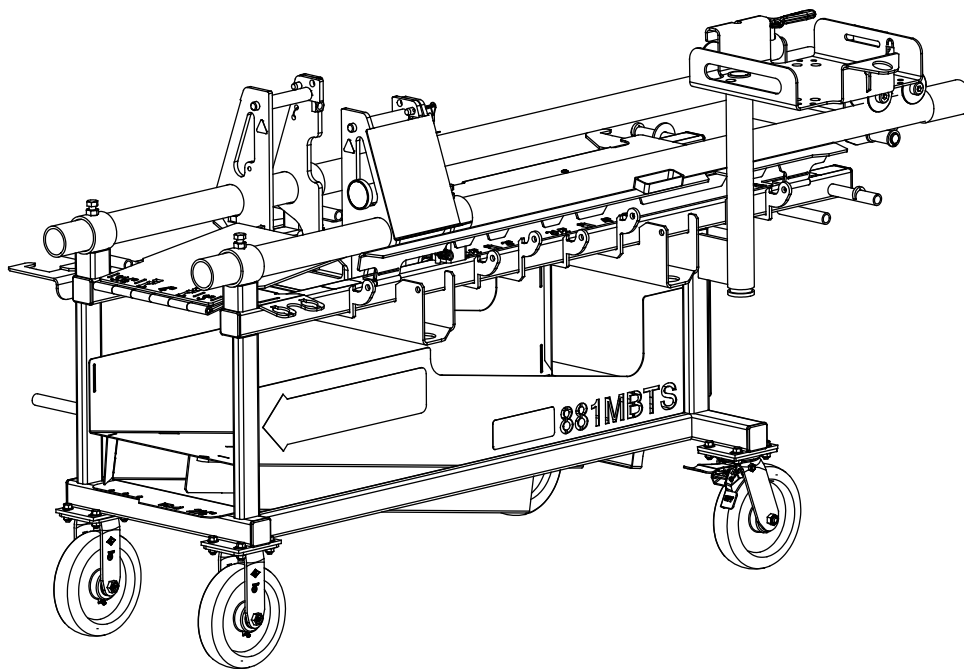


INSTRUCTION MANUAL



Mobile Bending Table for 881 Hydraulic Bender



Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

KEEP THIS MANUAL

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Safety Symbols Key

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

indicates a hazardous situation which, if not avoided, **WILL** result in death or serious injury.

⚠ WARNING

indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury.

⚠ CAUTION

indicates hazards or unsafe practices which, if not avoided, **MAY** result in injury or property damage.



This symbol means read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.



This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.



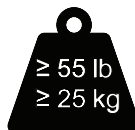
This symbol indicates the risk of hands, fingers or other body parts being crushed.



This symbol indicates the risk of striking injuries from moving parts of the product.



This symbol indicates the risk of product tipping, causing striking or crushing injuries.



This symbol means be careful lifting, object is heavy. This symbol indicates that parts of this tool weighs more than 55 lbs. (25 kg), use proper lifting technique to reduce the risk of injury.



This symbol indicates the risk of injury from a falling object on the feet

Tool Specific Safety Information

⚠ WARNING



Use the correct tool and accessories for your application. The correct tool will do the job better and safer at the rate for which it was designed. Use of the tool for operations different from those intended can result in a hazardous situation.

Before operating this tool, read and understand:

- This operator's manual
- The instructions for any other equipment or material used with this tool
- Markings on the tool
- Required work site safety procedures

Failure to follow all instructions and warnings may result in serious injury.

- **Keep hands away from moving parts.** Fingers and limbs can be crushed.
- **Do not stand in a direct line with the follow bar while bending.** The follow bar is under high pressure during use and has potential to propel forward rapidly.
- **Do not use as a step or ladder.** This table is on wheels and could shift leading to a hazardous situation.
- **Secure loose equipment and materials before operating or transporting table.** Loose equipment or material can fall and cause tipping and striking injuries or damage the equipment.
- **Transport table over level surfaces to reduce the risk of tipping.** Falling equipment can cause serious injury
- **Proper set up is essential to minimizing risk during use.** Set up the tool and work area according to these procedures to reduce the risk of injury.
- **Use personal protective equipment (PPE).** **Always wear eye protection.** Protective equipment used for appropriate conditions will reduce the risk of personal injuries.
- **Dress properly.** Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

- **Keep bystanders a safe distance from the work area.** Additional people close to the operator increases the risk of injury to themselves and the operator from distraction or interaction with equipment.
- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Use this equipment only in accordance with these instructions, considering the working conditions and the work to be performed.** Use of this table for operations different from those intended could result in a hazardous situation.
- **Some parts and accessories of this tool are heavy.** Use proper lifting techniques to reduce the risk of injury.
- **Do not alter this product in any manner or attach any tools that are not specified in this manual.** Use of this table with accessories and equipment different from those specified could result in a hazardous situation.
- **Stay alert and use common sense when using and transporting this equipment.** Keep control of the table and be aware of the environment, a moment of inattention may result in the table tipping or rolling uncontrollably. Serious personal injury can occur if the table hits someone.

Greenlee Contact Information

If you have any questions, need to arrange service or purchase parts or accessories for this Greenlee product: Contact your local Greenlee distributor or Greenlee's Customer Service Center.

Additional copies of this manual are available for download at www.greenlee.com

Greenlee Customer Service

USA: 1-800-435-0786 | Canada: 800-435-0786

International: 1-815-397-7070

GRNCustomerService@emerson.com

Shipping address:

Greenlee Factory Service Center

4411 Boeing Dr., Rockford, IL 61109

Tool Description

The Greenlee 881MBTS Mobile Bending Table is used to aid transport of the Greenlee 881 series hydraulic bender and accessories. This table allows the bender to operate in an upright position to simplify bending.

Features

- Storage of all bending accessories including shoes, saddles, follow bars, pins, and yoke.
- Security features to secure accessories.
- Casters and fork pockets for mobility.
- Designed to fit through a 32" wide doorway with all accessories attached.
- Chain vise for securing conduit.
- Protractor for checking bends.
- Swivel tray with pendant holder for hydraulic pump.

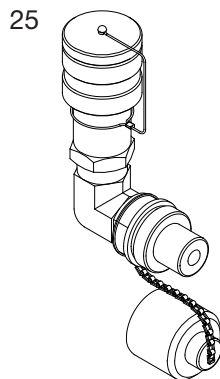
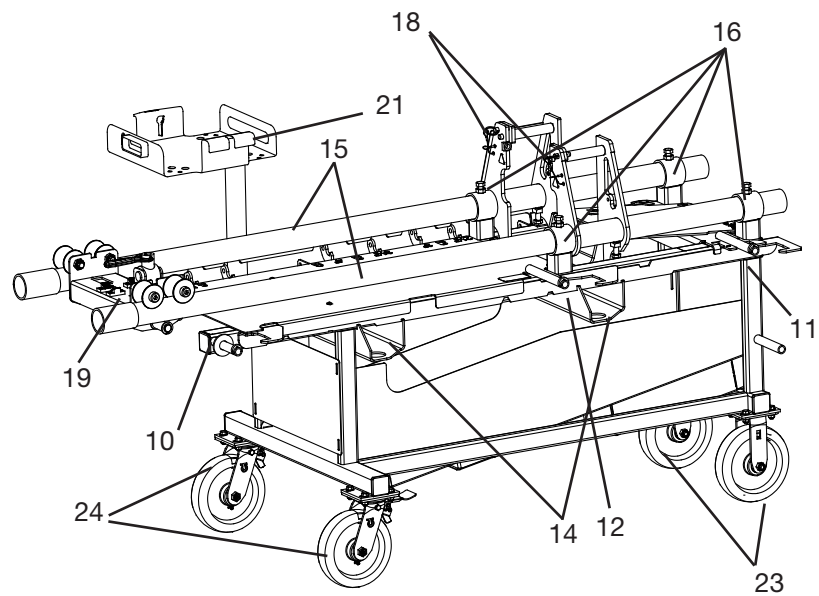
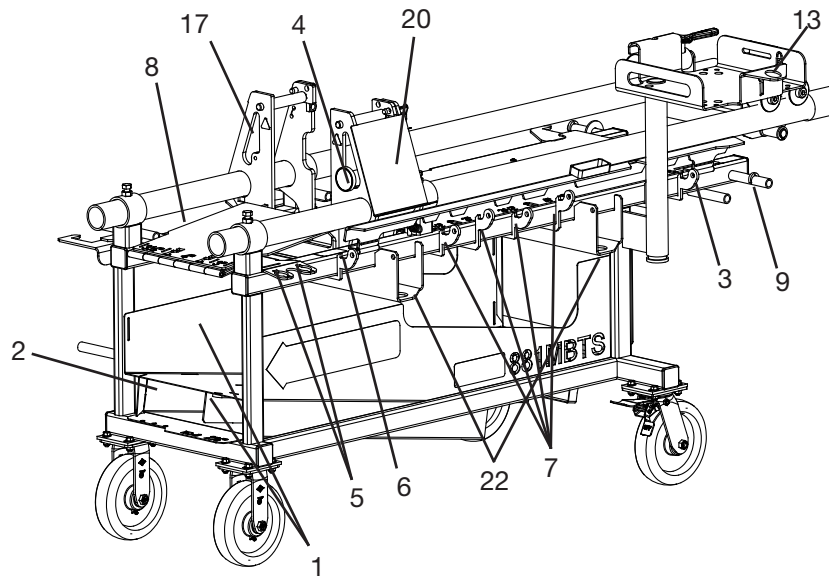
Specifications

Weight (MBTS w/ pump tray and vise):355 lb (161 kg)
Weight (MBTS w/ 980 series pump, bender, and accessories):1190 lb (540 kg)
Dimensions (MBTS w/ pump tray):80.0 in. x 30.9 in. x 41.9 in. (203.2 cm x 78.5 cm x 106.4 cm)
Dimensions (Maximum Operating Footprint):80.0 in. x 42.5 in. x 92.3 in. (203.2 cm x 108.0 cm x 234.4 cm)
Fork Pocket Dimensions:5.00 in. x 2.75 in. (12.70 cm x 7.00 cm)
Padlock (Not included) :No. 1 or No. 5 Master Lock or equivalent

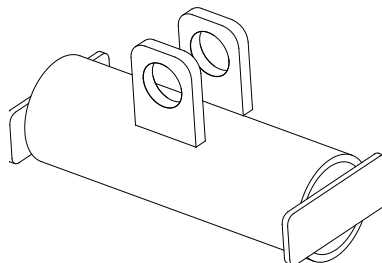
All specifications are nominal and may change as design improvements occur.

Tool Identification

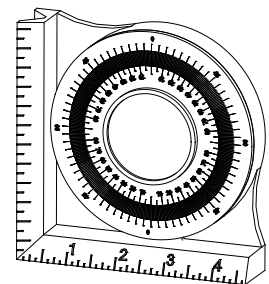
1. Follow Bar Storage
2. Misc. Storage
3. Yoke Storage
4. Cotter Pin Storage Magnet
5. Saddle & Yoke Pin Storage
6. Ram Positioner Storage
7. Saddles Storage
8. Forward Tray
9. 2-1/2" Shoe Storage
10. 3-1/2" Shoe Storage
11. 3" Shoe Storage
12. 4" Shoe Storage
13. Pump Tray & Pendant Holder
14. Fork Pockets
15. Conduit Rails
16. Conduit Collars
17. Bender Carriage
18. Carriage Latches
19. Chain Vise
20. Tablet/Notebook Tray
21. Electrical Cord Wrap
22. Shipping Strap Holes
23. Caster - Rigid
24. Caster - Swivel
25. 90° Coupler
26. Ram Positioner
27. Protractor



26

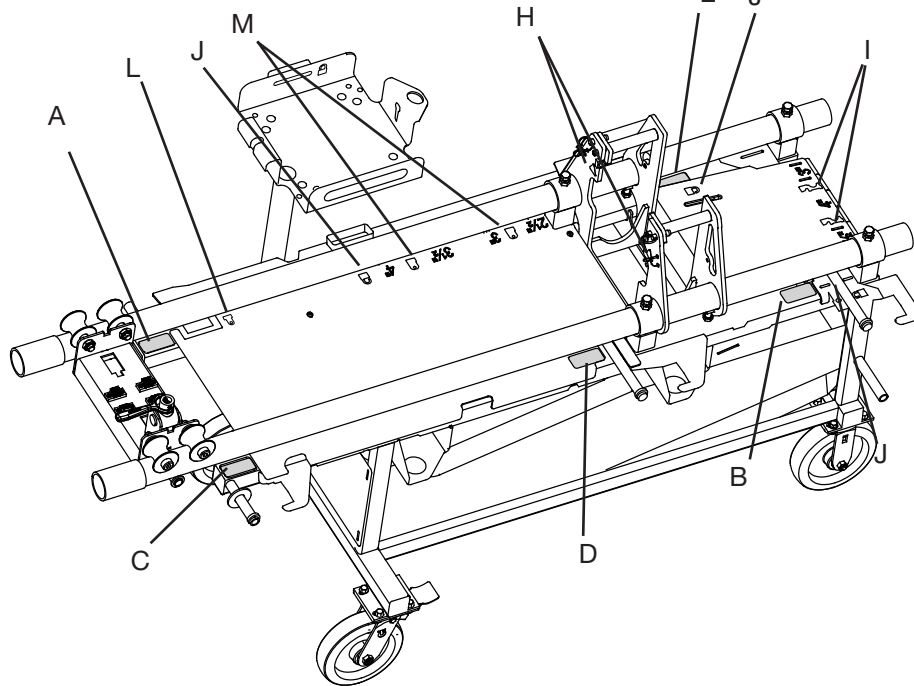
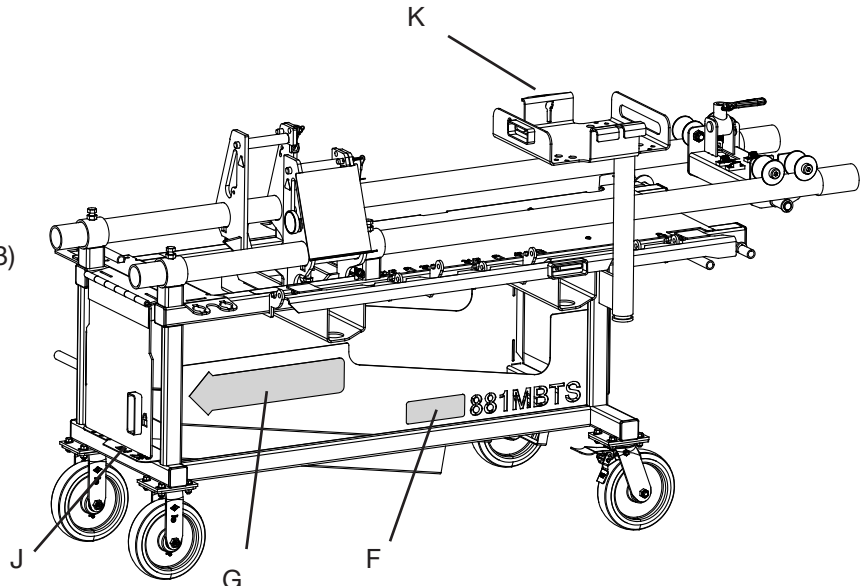


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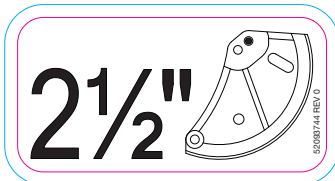


Decals/Markings & Locations

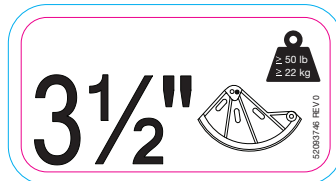
- A. 2-1/2" Shoe Storage ID (52093744)
- B. 3" Shoe Storage ID (52093745)
- C. 3-1/2" Shoe Storage ID (52093746)
- D. 4" Shoe Storage ID (52093747)
- E. Ram Positioner Storage ID (52093748)
- F. 881 MBTS Identification Decal (52093743)
- G. Greenlee Branding Decal (12457)
- H. Pinch Point Hazard Decal (50062140)
- I. Follow Bar Icon
- J. Lock Pocket Icon
- K. Pump Pendant Icon
- L. Yoke Icon
- M. Saddle Icon



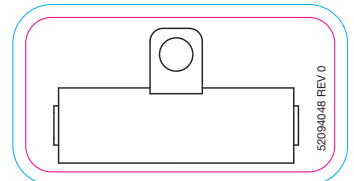
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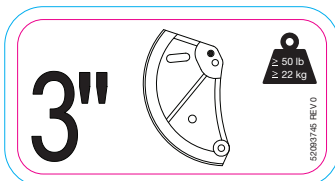
C.



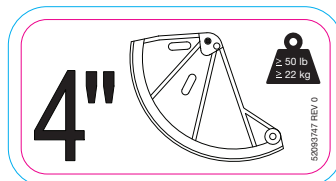
E.



B.



D.



Keep all decals clean and legible, and replace when necessary

Decals/Markings & Locations (cont'd)

F.



J.



G.



K.



H.



L.



I.



M.



Keep all decals clean and legible, and replace when necessary

Training & Qualifications

Only workers trained and qualified should use this tool, especially in a live line environment. It is recommended at least a second trained and qualified person is present at appropriate distance to respond if needed. Follow all training and proper jobsite safety precautions outlined by your industry, government, and employer.

Pre-Operation Inspection

⚠ WARNING

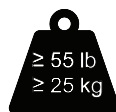
Daily before use, inspect the tool and correct any problems before using to reduce the risk of injury and prevent tool damage. If any problems are found, do not use this tool until the problems have been fixed, failure to follow these steps increases the risk of injury.

1. Clean any oil, grease, or dirt from the tool, including handles and controls. A clean tool aids inspection.
2. Inspect for wear and damage before use. Do not use if any parts are worn, corroded, rusted, or cracked. Replace any components with Greenlee replacement parts. A damaged, worn or improperly assembled item could break and result in flying debris.
3. Check for proper assembly and completeness, do not use if there are missing or misaligned parts.
4. Check for the presence and condition of decals.
5. Inspect any other equipment or accessories being used by following the inspection sections of their instruction manuals.

If any issues are found, do not use the tool until corrected.

Work Area & Tool Set-Up

⚠ WARNING



- **Proper set up is essential to minimizing risk during use.** Set up the tool and work area according to these procedures to reduce the risk of injury.
- **Parts of this tool are heavy.** Use proper lifting techniques to reduce the risk of injury.
- **Secure loose equipment and materials before operating or transporting table.** Loose equipment or material can fall and cause tipping and striking injuries or damage the equipment.

1. Check work area for:
 - Adequate lighting
 - Flammable liquids, vapors or dust that may ignite. If present, do not work in area until sources have been identified and isolated properly.
 - A clear, level, stable and dry place for all equipment and space for the operator to work comfortably and according to tool operating instructions to reduce the risk of injury.
 - Clearly marked or easily recognizable to prevent people from coming into the area while the tool is being used. Barriers or cones around work site are ways to do this.
2. Inspect the work to be done. Determine the correct equipment and accessories for the job.
3. Confirm all related equipment has been inspected.
4. Lock the rear swivel casters and store any loose tools before beginning assembly.
5. Check that the conduit rails and carriage are in the proper position. The carriage should be touching the inner conduit collars and the conduit should not extend more than 3 in. past front collars (Fig. 1).

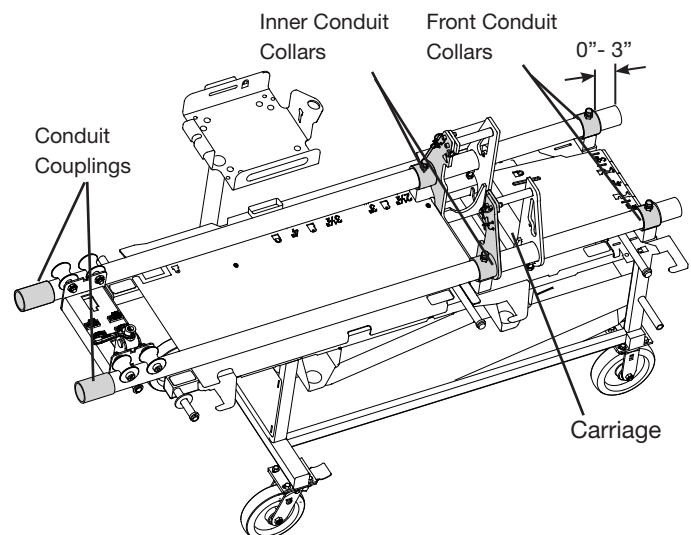


Figure 1

If necessary, reposition the conduit rails by loosening the four screws on the collars to allow the conduit rails to slide. To move the carriage, loosen the two screws underneath the carriage and slide it into position along conduit rails. Retighten screws when everything is in the proper position.

6. Check the conduit couplings (Fig. 1) are secure and hand tighten if necessary. A loose coupling could allow the vise to fall off the end of the conduit. Remove these couplings to remove vise.

5. Swing the forward tray up until it rests on the carriage. (Fig. 2)

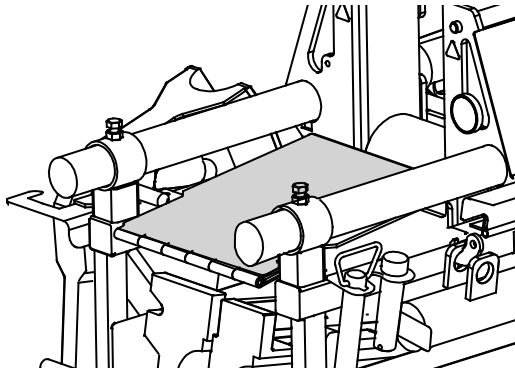


Figure 2

6. Assemble the bender forks and roller on the ground before lifting onto the carriage. (See 881 Bender Manual)
7. Slide the ram in between the connecting forks with its scale facing the saddle/operator side of the cart and secure with pins in the 2-1/2 in. conduit position on the forks. (Fig. 3)
8. Fasten the 90° coupler to the ram coupling and attach the hydraulic hose to the 90° coupler.

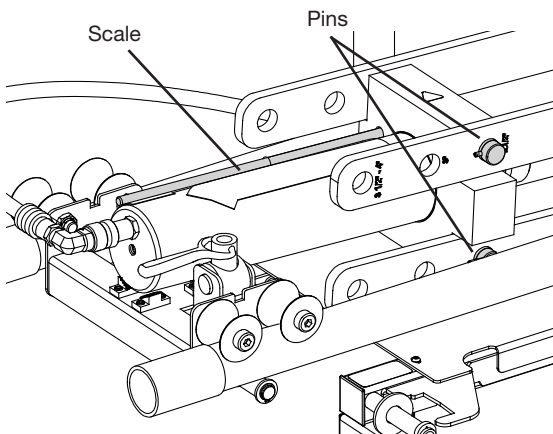


Figure 3

9. Carefully swing the connecting forks and ram into the vertical bending position and lock the forks in place by revolving and pinning the carriage latches in place. (Fig. 4)

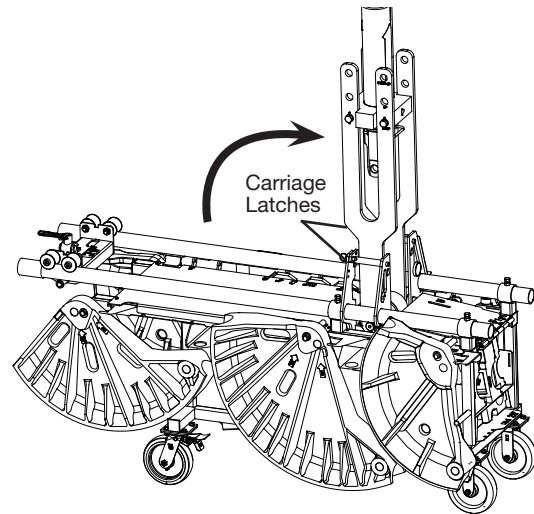


Figure 4

10. Pin the yoke to the ram piston with the spring clip. (Fig. 5)

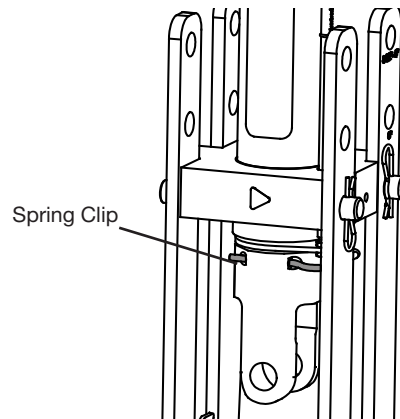


Figure 5

11. Place a 900 series hydraulic pump in the pump basket so the front of the pump is facing away from the pivot. Store the pendant in the holder on the basket when not in use.
 - The pump reservoir should be fastened to the basket to ensure no movement during transport through the underside of the basket. Different pumps require different size screws and hole patterns.
 - 980: 1/4"-20 x 3/4" L screws
 - 940 and 960: 3/8"-16 screws

12. Attach the free end of the hose from the ram to the pump coupler, make sure the coupler is fully tightened to ensure proper ram function.
13. Load all accessories (Fig. 7 and 8).

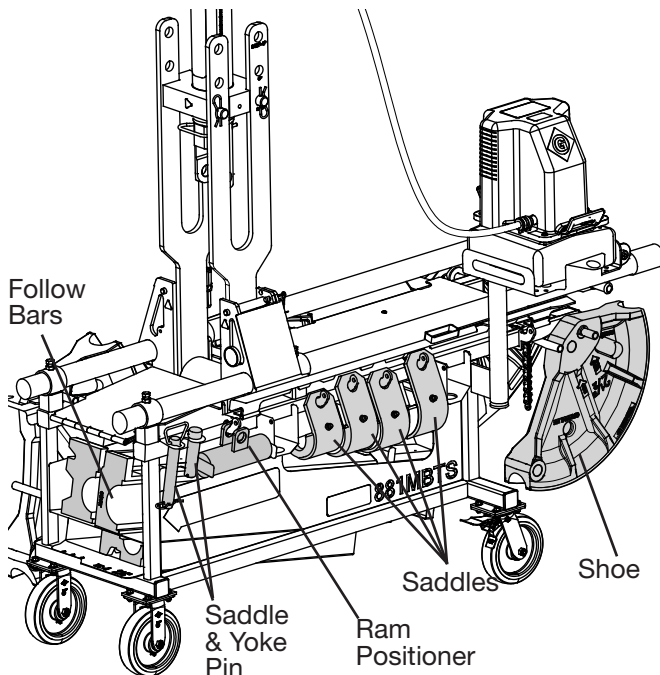


Figure 7

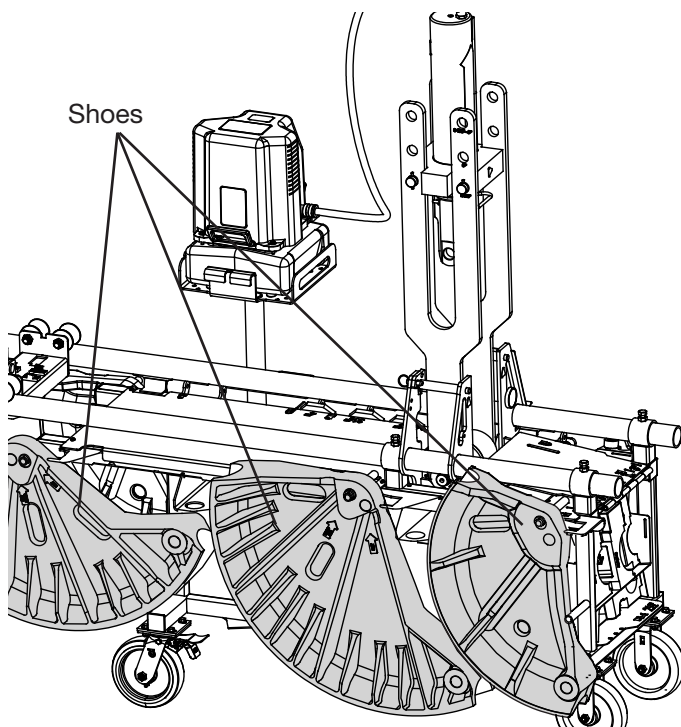
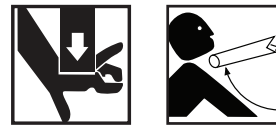


Figure 8

Bending Procedure

⚠ WARNING



- **Keep hands away from moving parts.** Fingers and limbs can be crushed.
- **Use this equipment only in accordance with these instructions, considering the working conditions and the work to be performed.** Use of this table for operations different from those intended could result in a hazardous situation.
- **Do not stand in a direct line with the follow bar while bending.** The follow bar is under high pressure during use and has potential to propel forward rapidly.

Adjusting Ram Position

The ram positioner is used to adjust the position of the ram within the connecting forks while in the vertical position. (Fig.9)

1. To attach the ram positioner to the yoke, first rotate the yoke 90° from normal bending position.
2. Pivot the ram positioner so the tabs are vertical to fit between the connecting forks.
3. Rotate the rampositioner so the yoke connection tabs are up.
4. Slide the ram positioner up and pin to the yoke.

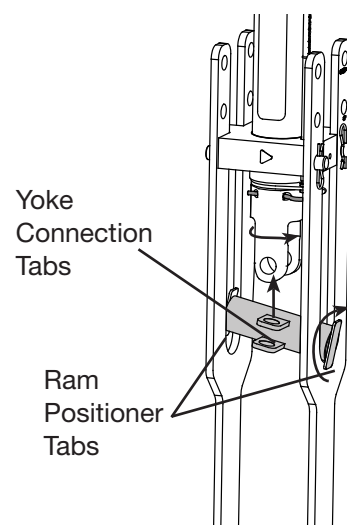
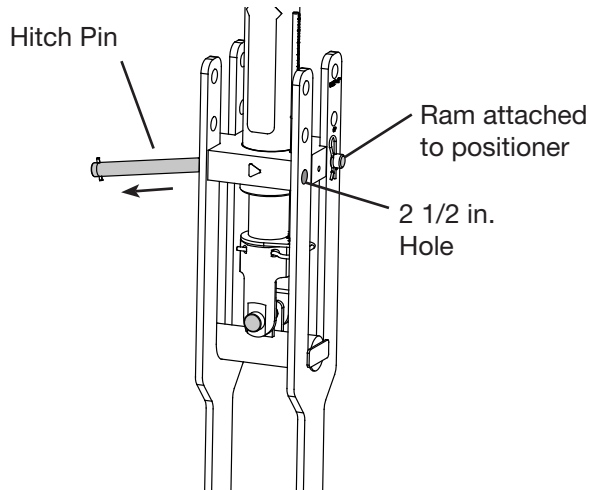
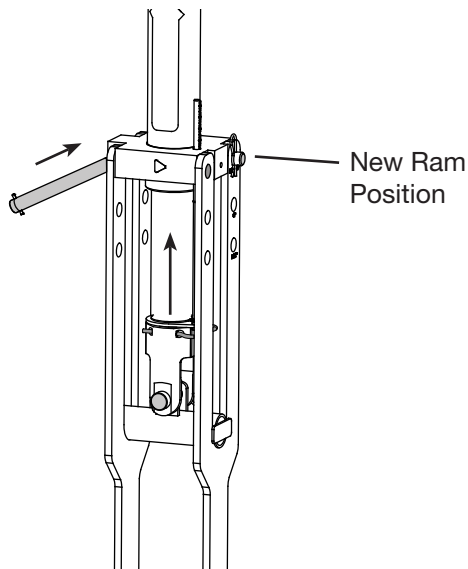


Figure 9

5. Advance the ram piston until the ram positioner is seated on the connecting forks and holding the weight of the ram.
6. Remove the two hitch pins from the ram and connecting forks; (Fig. 10) the piston may need to be advanced or retracted slightly to loosen the pins.

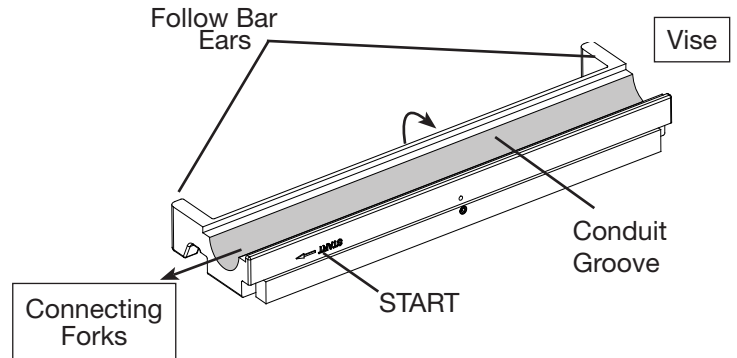

Figure 10

7. Advance or retract the ram piston until the ram's pin holes align with the hole marked with desired conduit size on the connecting forks.
8. Pin the ram in new position. (Fig. 11)
9. Retract the ram piston enough to allow the ram positioner to be removed from between the forks.

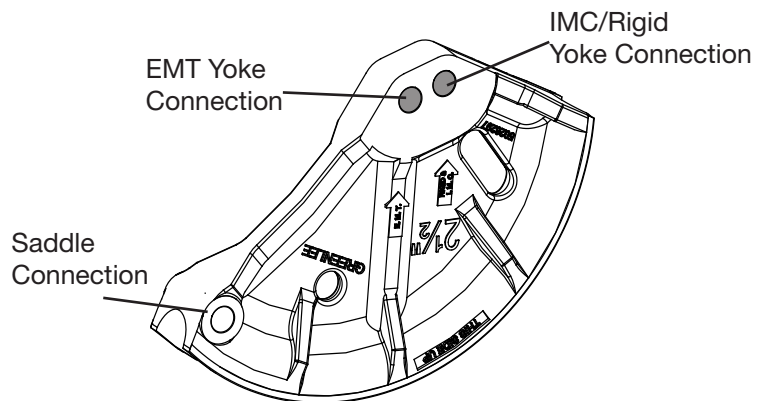

Figure 11

Bend Set Up

1. Confirm the ram is secured at the proper height for the desired conduit size. The ram pins should be in the holes marked for the conduit size.
2. Choose the follow bar that matches the conduit size. Rotate so the follow bar ears are up and insert the "START" end between the connecting forks away from the vise. (Fig. 12)
3. Once the "START" end is past the connecting forks, rotate the follow bar again so the conduit groove is up.


Figure 12

- a. The 3-1/2 in. follow bar is taller than the others and requires more space to pass between the forks. To load the 3-1/2 Follow bar lower the forks then unpin the ram to allow for the forks to be spread apart to accommodate the taller follow bar. After inserting the follow bar, secure the ram and lift the forks back into position.
3. Place the matching shoe on the follow bar with the saddle connection closest to the "START" end.
4. Lower the piston and yoke until it is aligned with the EMT or IMC/Rigid yoke connection on the shoe, then pin in place. (Fig. 13)


Figure 13

5. Pin the matching saddle to the front of the shoe with the saddle lip facing away from the bender forks (Fig. 14).

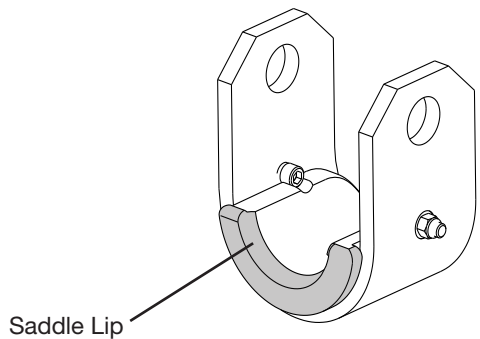


Figure 14

6. Slide the conduit through the front of the saddle and shoe, or the saddle can be pinned to the shoe after the conduit is in position. Position the conduit so the bending mark is aligned with the outer edge of the saddle lip. (Fig. 15)

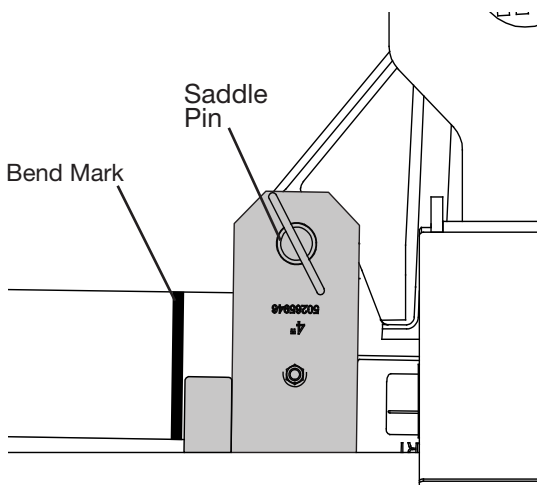


Figure 15

7. With the chain vise as close to the conduit track couplings as possible, “snug up” the unit by keeping the saddle and follow bar tight against the carriage and advance the ram until the conduit, shoe and saddle fit tightly together.
8. Clamp the rear end of the conduit in the vise by securing the chain over the conduit and turning the handle until tight.

9. Bend conduit to desired angle, follow the operating instructions in the 980 series hydraulic pump instructions. The follow bar and vise will travel with the conduit as it bends. Do not over travel the follow bar (Fig. 16).

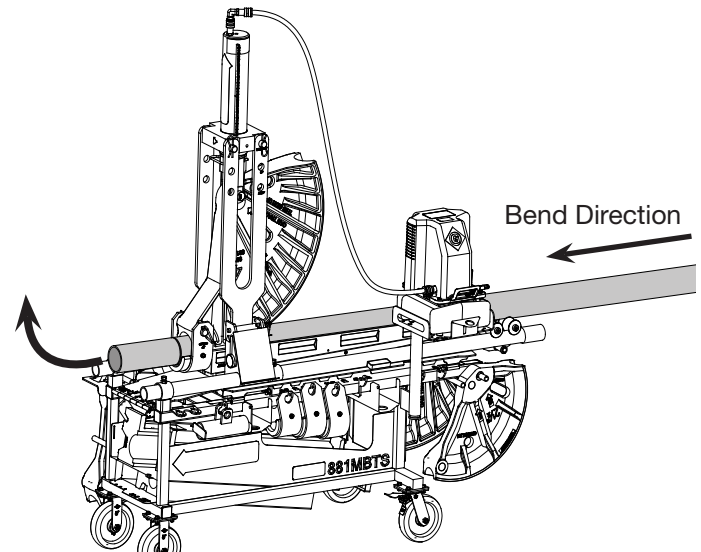


Figure 16

Security

The MBTS has security features to secure bending accessories when transporting or storing. The padlock pockets are identified by the lock cutout on the cart. The latches are for No.1 or No. 5 Master Lock or equivalent sized padlocks, not included with purchase.

- The 3 in., 3-1/2 in. and 4 in. shoes are locked by sliding the plate with hooks over the shoes and padlocking at the front. (Fig. 17)

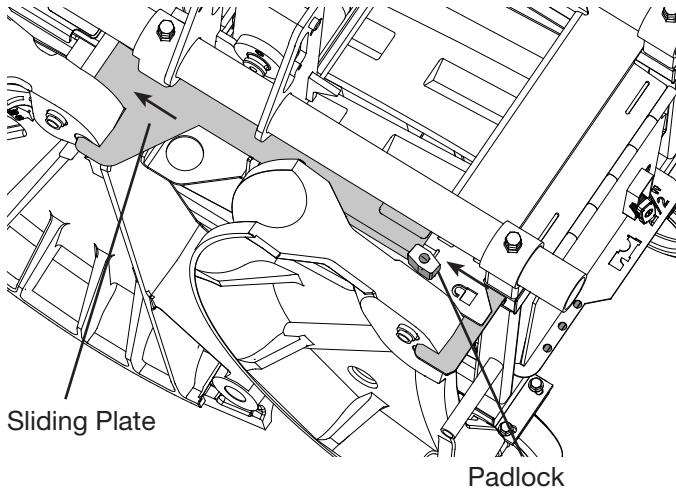


Figure 17

- The 2-1/2 in. shoe, Yoke, Ram Positioner and all Saddles have a hinged plate that folds over them and padlocks towards the middle near the rear fork tube. (Fig. 18)

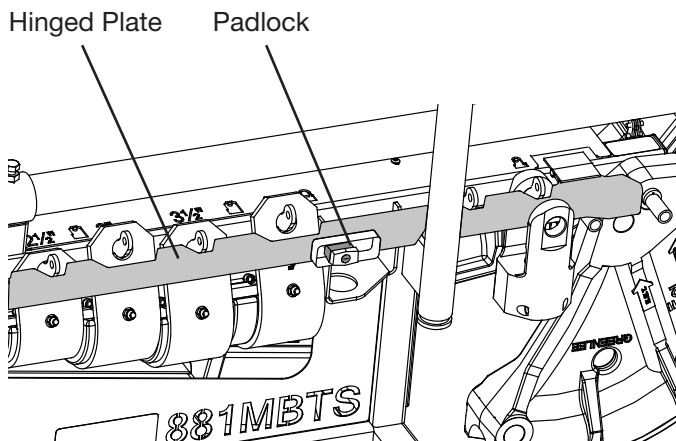


Figure 18

- Follow bars and any items in the Misc. storage shelf (such as pins) are secured by swinging the forward tray downwards and padlock through the slot in the tray. (Fig. 19)

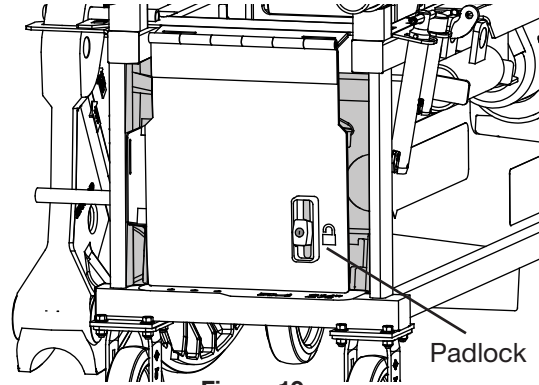


Figure 19

When not in use padlocks can be hung or locked on the three holes (Fig. 20) in front of the misc. storage shelf.

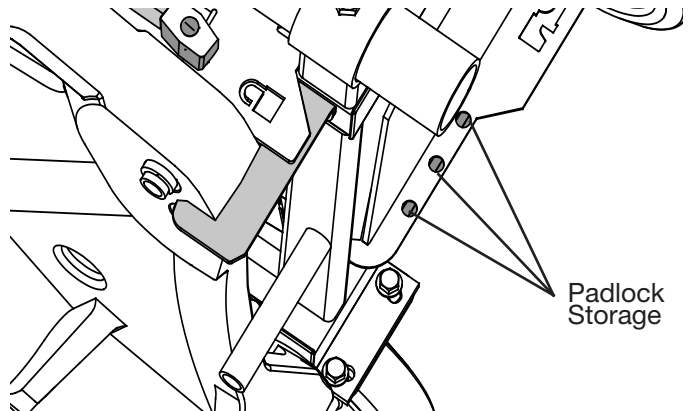


Figure 20

Transportation

⚠ WARNING



- **Secure loose equipment and materials before transporting table.** Loose equipment or material can fall and cause tipping and striking injuries or damage the equipment.
- **Stay alert and use common sense when transporting this equipment.** Keep control of the table and be aware of the environment, a moment of inattention while transporting may result in serious personal injury if the table tips or rolls away on its own.
- **Some parts and accessories of this tool are heavy.** Use proper lifting techniques to reduce the risk of injury.

Preparing for Transport

Before transporting the table, lower the Ram and Connecting Forks:

1. Lock rear casters to prevent the table from moving.
2. Move the chain vise toward the carriage. The vise needs to be in a position to support the ram and secure it during transport but not so close as to interfere with the forks, just past the 3-1/2 in. and 2 in. bending shoe storage pegs is ideal.
3. Move the ram to the 2-1/2 in. holes on the connecting forks. This position is easiest for the operator to lay the ram down and keeps the ram from sticking out over the back of the table.
4. Unpin the carriage latches and carefully lower the ram onto the chain vise.
5. Clamp the ram body in the chain vise (Fig. 21). Do not use the 90° coupler as a handle or allow it to lay on the vise or the coupler could be damaged.

Vise Chain
Around Ram

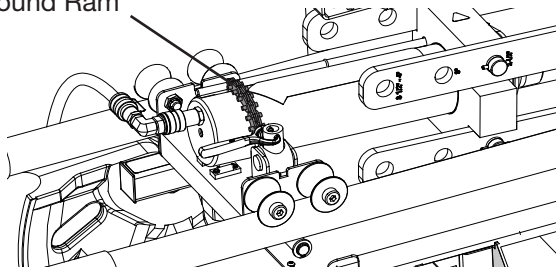


Figure 21

6. Secure loose tools and accessories in their respective storage spaces and close or lock security features to prevent accessories coming loose in transport. Strap holes are located in the fork pockets to tie down the MBTS for shipping. (Fig. 22)

Strap
Holes

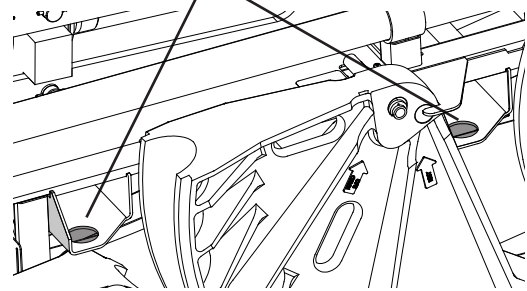


Figure 22

7. Rotate the pump basket over the table and secure it in place. This will prevent the basket swinging free during transport.
8. Tuck the pump hose out of the way behind the 3-1/2 in. bending shoe (Fig. 23).

Hose

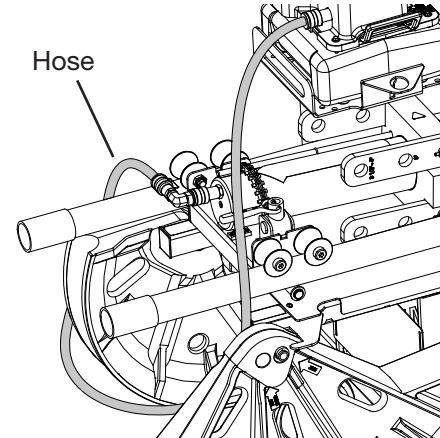


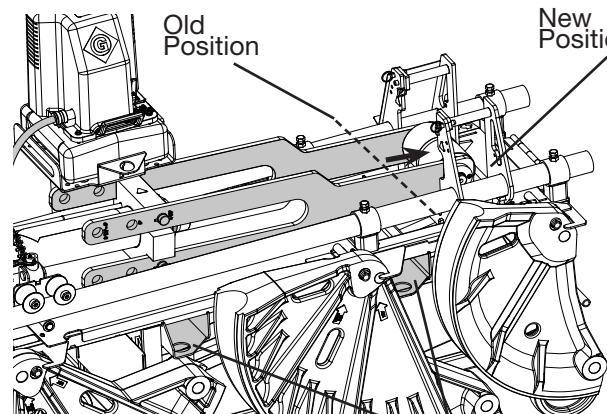
Figure 23

Forklift Transport

When using a forklift, the carriage must be moved forward past the first fork pocket to unblock it and to balance the load (Fig. 24). Loosen the two screws on the Carriage underside to release it and slide along the conduit rails. Tighten the screws once in position.

Old
Position

New
Position



Fork Lift Pockets

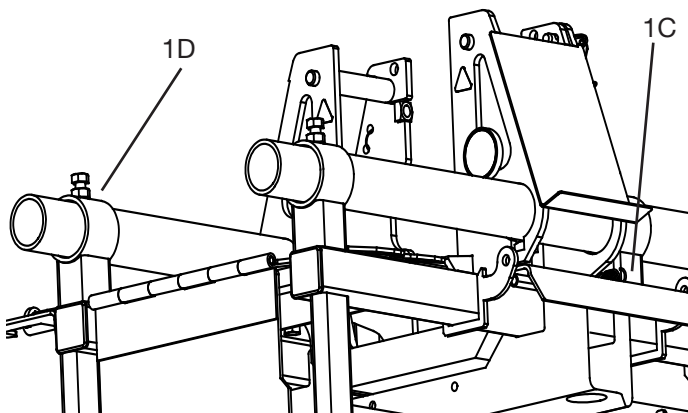
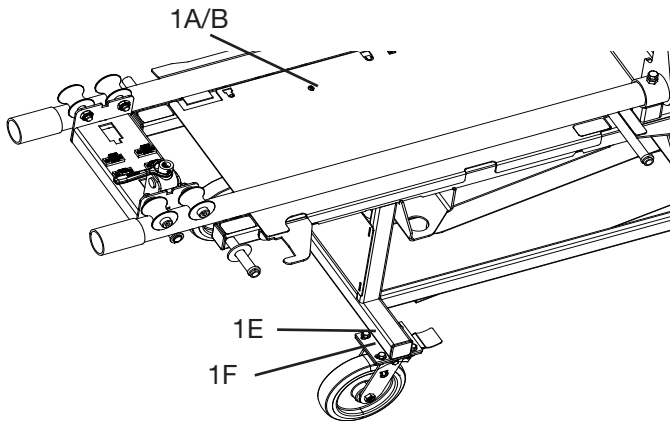
Figure 24

Replacement Parts/Kits

Cat #	Description
14064G	CASTER, RIGID
14065G	CASTER, SWIVEL, LOCKING
14066G	FASTENERS KIT, MBT
14067G	DECAL KIT
14092G	RAM POSITIONER
14093G	90° COUPLER
14068G	CARRIAGE
14069G	FASTENERS KIT, CARRIAGE
14070G	PIPE VISE
14071G	PIPE ROLLER KIT
14072G	AXEL & ROLLER KIT
14073G	FOOT KIT
95961	SCREW & HANDLE KIT

1. Fasteners Kit, MBT

- A. Screw, BTN, 1/4-20 X 3/4in. L
- B. Nut, Lock, Flng, Hex 1/4-20
- C. Spring, Ext.
- D. Bolt, Hex, 1/2-13 X 7/8in. L
- E. Screw, Flng, 3/8-16 X 1in. L
- F. Nut, Flange, Nylock, 3/8-16

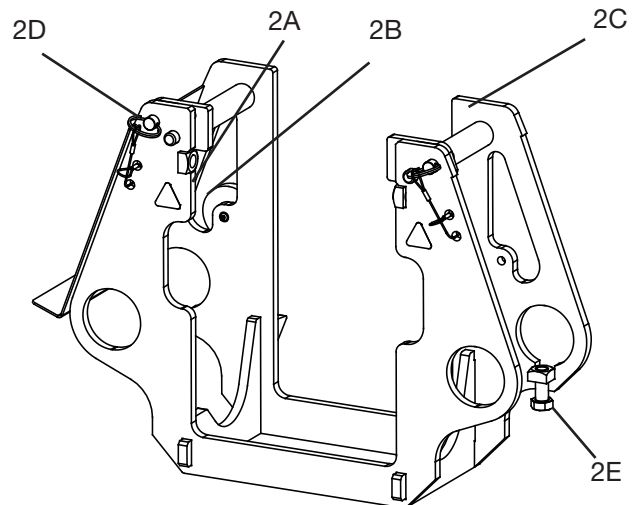


Disposal

Parts of these tools contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.

2. Fasteners Kit, Carriage

- A. Magnet, Carriage
- B. Screw, BTN HD, M4
- C. Pin, 1/2 in. D
- D. Lanyard
- E. Bolt, Hex, 1/2-13 X 1-1/4in. L



3. Pipe Roller Kit

- A. Roller, 2 in. Pipe
- B. Washer, 3/4 in. ID
- C. Screw, Shoulder, 5/8 in.
- D. Nut, Locking, 5/8 in.

4. Axel & Roller Kit

- A. Retaining Ring
- B. Washer, 3/4 in. ID
- C. Axel
- D. Roller, Straight

5. Foot Kit

- A. Foot
- B. Screw, Cap, 1/4 in.
- C. Nut, Locking, 1/4 in.

6. Screw & Handle Kit

- A. Screw Unit & Chain
- B. Handle Assy
- C. Screw, BTN HD, 1/4 in.
- D. Washer, 1/4 in. ID

