

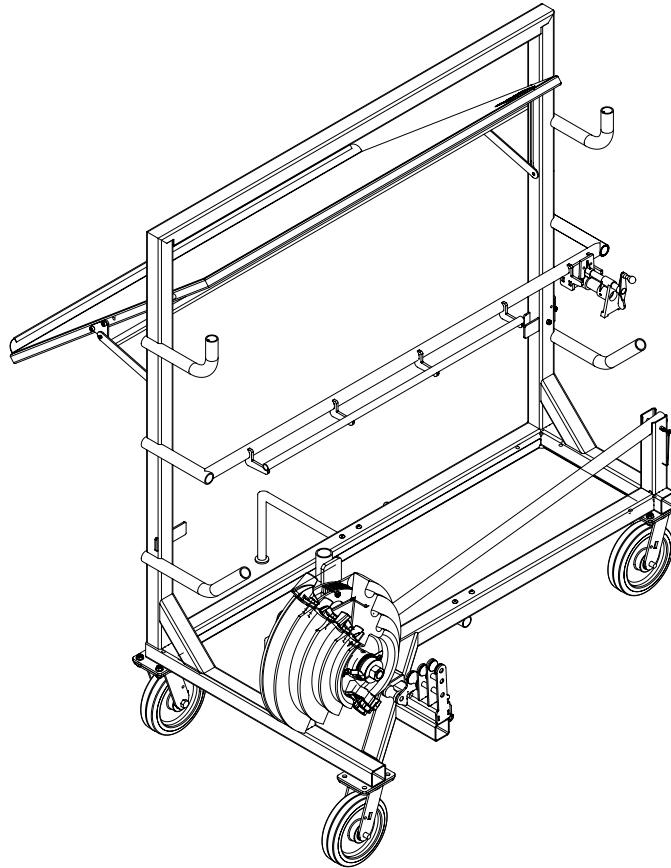


Current Tools

FOR THE PROFESSIONAL ELECTRICIAN

752 Bending Work Station

**For bending ½" to 1" Rigid conduit,
IMC conduit and ½" to 1¼" EMT conduit**



Operating, Maintenance, Safety and Parts Manual

4/16



Read and understand this material before operating or servicing this Bending Work Station. Failure to understand how to safely operate and service this unit may result in serious injury or death.

This manual is free of charge. All personnel who operate or service this Bending Work Station should have a copy of this manual and read and understand its contents. To request a copy, call, write to the address below or visit our website at www.currenttools.com.

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Safety Alert Symbol

THIS SAFETY SYMBOL is used to call your attention to instructions that concern your personal safety. It means: ATTENTION! BE AWARE! THIS IS AN IMPORTANT SAFETY INSTRUCTION!

Read, understand, and follow these safety instructions. Failure to follow these safety instructions may result in injury or death.

DANGER

Immediate hazards which, if not avoided, **WILL** result in serious personal injury or death.

WARNING

Hazards or unsafe practices which, if not avoided, **COULD** result in serious personal injury or death.

CAUTION

Hazards or unsafe practices which, if not avoided, **COULD** result in minor personal injury or property damage.

RETAIN SAFETY INFORMATION



This manual should be read and understood by all personnel who operate or service this Bending Work Station. Failure to understand how to safely operate and service this unit could result in serious injury or death. This unit should only be operated and serviced by qualified personnel.

IMPORTANT SAFETY INFORMATION

- ▲ WARNING** Keep hands and feet away from pinch points such as bending shoe, ratchet handle and conduit when operating the bender.
- ▲ WARNING** DO NOT leave the ratchet handle in the up position. The handle could fall and cause serious injury.
- ▲ WARNING** DO NOT force tool. If bend cannot be completed with the supplied ratchet handle, discontinue bend and determine cause before continuing. DO NOT use a ratchet handle longer than 4'.
- ▲ WARNING** NEVER alter this equipment. Doing so will void the warranty and could cause serious injury or death.
- ▲ WARNING** DO NOT stand on the Bending Work Station. Serious injury could occur if Bending Work Station is tipped.
- ▲ WARNING** ALWAYS check for damaged or worn parts. Before further use of the tool, any part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. Any part that is damaged should be properly repaired or replaced.
- ▲ WARNING** ALWAYS lock the two swivel casters on the Bending Work Station prior to using the print table or the bender.
- ▲ CAUTION** Use caution when raising or lowering the print table to avoid pinch points.
- ▲ CAUTION** ALWAYS keep conduit under control when unloading. Conduit not under control could injure the operator or others in the area.
- ▲ CAUTION** ALWAYS inspect the Bending Work Station before operating. Replace any damaged, missing or worn parts.
- ▲ CAUTION** WEAR approved safety glasses when using the bender.
- ▲ CAUTION** Bending Work Station MUST be used on a firm, flat surface. DO NOT use on an inclined surface.
- ▲ CAUTION** ALWAYS keep the path of the bending conduit clear of obstructions.

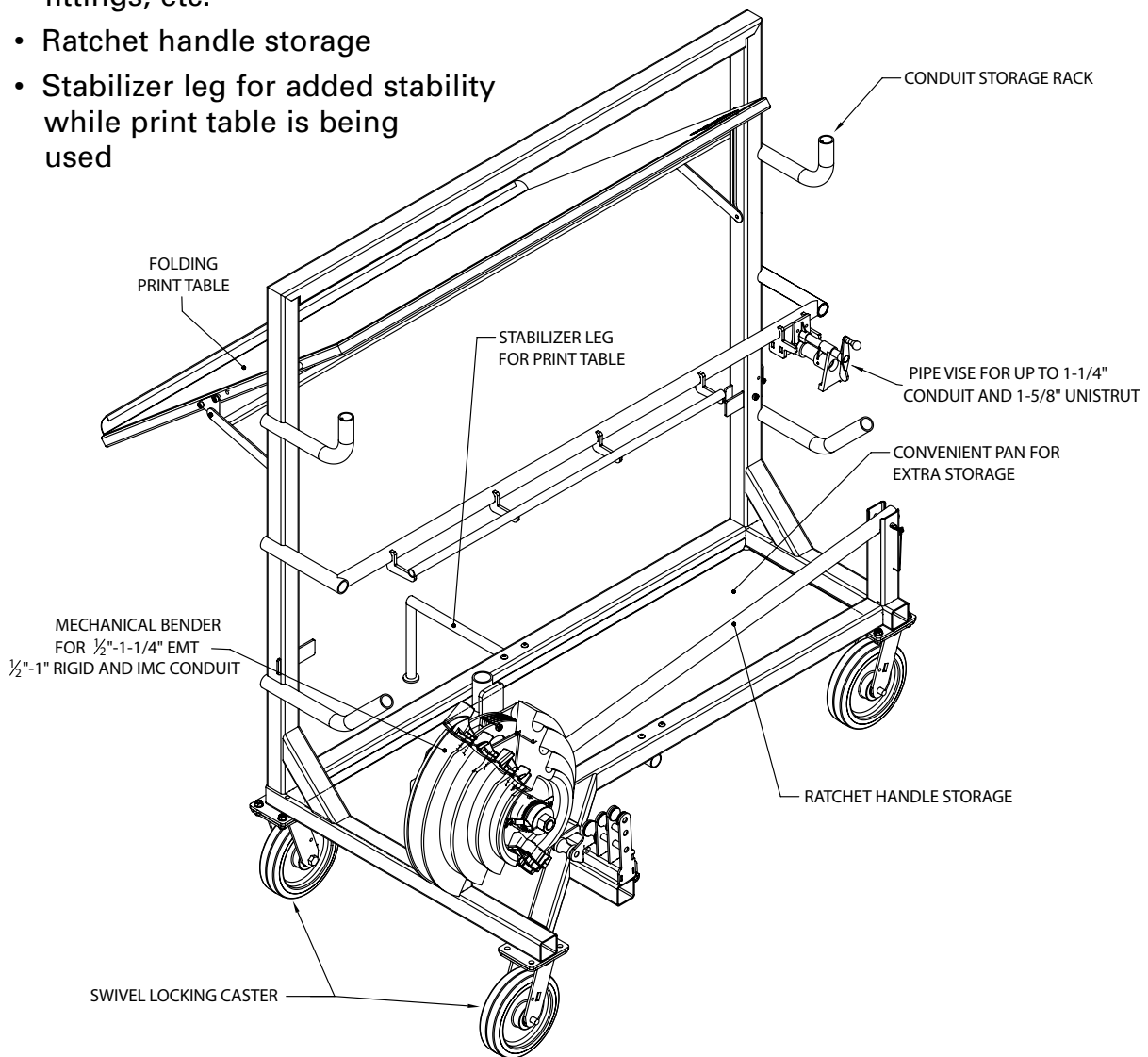


IMPORTANT SAFETY INFORMATION — CONTINUED

- ▲ CAUTION** Keep firm hand pressure on the ratchet handle while bending. The stored energy of bending conduit could cause the ratchet handle to spring forward and strike operator or nearby personnel.
- ▲ CAUTION** REMOVE and store the ratchet handle before moving or transporting the Bending Work Station.
- ▲ CAUTION** ONLY use the Bending Work Station for its intended purpose. Only use the bender to bend the specified types and sizes of conduit or pipe.
- ▲ CAUTION** ALWAYS engage the stabilizer leg any time the print table is raised. Failure to engage the stabilizer leg could allow the Bending Work Station to tip, causing personal injury or property damage.
- ▲ CAUTION** ALWAYS securely tighten the pipe vise prior to measuring or cutting any tube, pipe or unistrut.
- ▲ CAUTION** ONLY cut one piece of material at a time in the pipe vise.
- ▲ CAUTION** ALWAYS ensure the linkage pins are fully engaged on both sides before using the print table.

FEATURES

- Four casters (two rigid, two swivel locking) for ease of transport
- Mechanical bender for 1/2" to 1" Rigid and IMC conduit and 1/2" to 1 1/4" EMT conduit
- Conduit storage racks
- Integral pipe vise will accommodate round tubing, square tubing and unistrut.
- Print table for blueprint viewing
- Storage tray for holding miscellaneous tools, fittings, etc.
- Ratchet handle storage
- Stabilizer leg for added stability while print table is being used





SPECIFICATIONS – 752 BENDING WORK STATION

Model No.	752
Capacity	1/2" to 1" RIGID and IMC conduit and 1/2" to 1 1/4" EMT conduit
Overall Cart Dimensions	62"L x 33"W x 62"H
Weight	290 lbs.



OPERATING INSTRUCTIONS — MECHANICAL BENDER

1. Locate the Bending Work Station on a firm, level surface. Lock the two swivel casters.
2. Place the ratchet arm in the up position. This will release the ratchet pawl. Rotate the bending shoe until the conduit hook for the size and type of conduit you are bending is at approximately the 6 o'clock position. (See Figure 7b).

NOTE: The bending shoe hooks are color coded. The blue hook is for Rigid, IMC and schedule 40 pipe. The silver hook is for EMT conduit.

3. Mark the conduit to desired length. Note that a minimum of 2" from the end of the conduit to the front edge of the hook is required to eliminate flattening the end of the conduit. See Figure 7b.

NOTE: Stub-up and offset information can be found on pages 9-12 in this manual.

4. Place conduit into the bender. The conduit should slide over the roller support, through the shoe groove and into the hook. The bending mark should be at the front (outside) edge of the hook. See Figure 7b.
5. Unpin supplied ratchet handle and insert it into the ratchet arm.

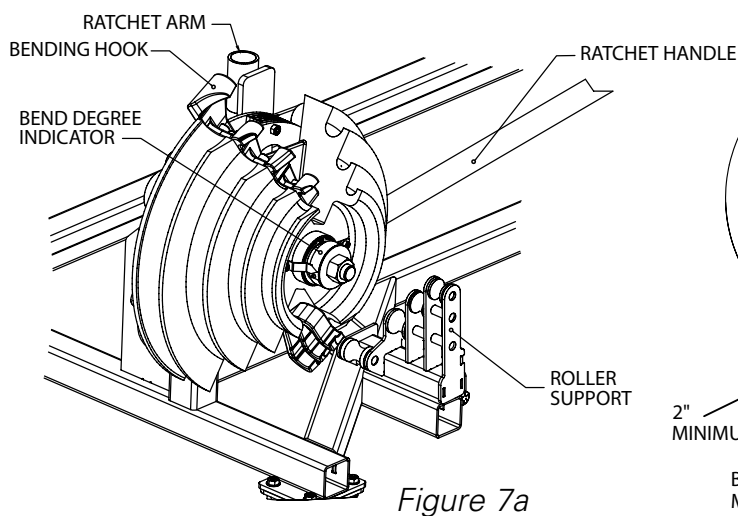


Figure 7a

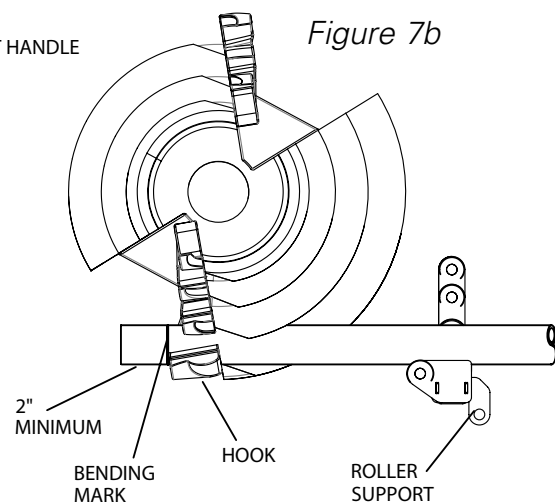


Figure 7b



OPERATING INSTRUCTIONS – CONTINUED

6. Adjust the bend degree indicator so that it is at the zero (\emptyset) position when the shoe hook first makes contact with the conduit.
7. Pull the ratchet handle down and return to the up position. Repeat until you have completed the desired bend.

NOTE: Springback compensation is not calculated on the bend degree indicator. Refer to the springback chart on page 10 to achieve your desired degree of bend.

8. To remove the bent conduit, raise the ratchet handle to the up position. Remove the ratchet handle from the ratchet arm and insert it into the ratchet handle storage location. While holding the bent conduit, slowly rotate the bending shoe in the counter-clockwise direction and remove the bent conduit.



STUB-UP BENDING INFORMATION

To locate bending marks and springback of 15, 30, 45, 60, and 90 degree bends for a desired stub:

1. Check Springback Chart A, B, or C for deduct length (See page 10). Note that minimum stub length is deduct length plus 2".
2. Measure and mark desired stub length on conduit (stub length mark). Subtract "Deduct Length" from this mark and make a second mark (bending mark). (See Fig 9a and 9b). Place bending mark at front edge of shoe hook. (See Figure 9c). Check Springback Chart A, B, or C for springback of desired degree of bend (See page 10). Bender should be advanced to this degree to obtain desired degree of bend.

Figure 9a

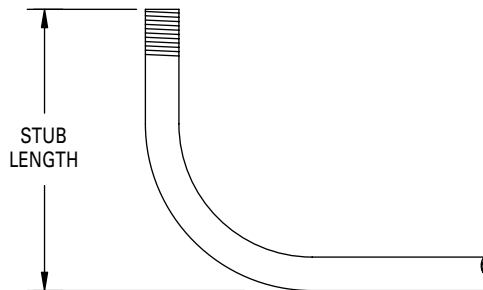


Figure 9b

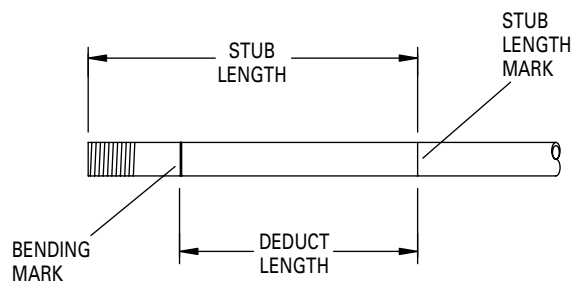
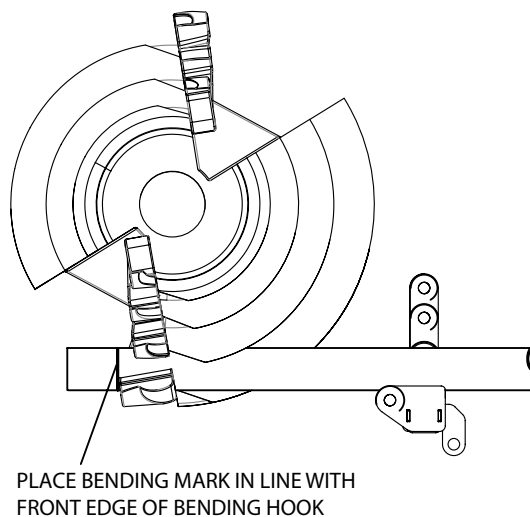


Figure 9c





SPRINGBACK CHARTS

Chart A – RIGID Conduit/Schedule 40 Pipe

Conduit Size	Deduct Length	Springback				
		15°	30°	45°	60°	90°
1/2"	7 1/2"	18	34	49	65	95
3/4"	9 1/4"	17	33	48	62	92
1"	11"	18	33	50	65	95

Chart B – EMT Conduit

Conduit Size	Deduct Length	Springback				
		15°	30°	45°	60°	90°
1/2"	7 1/2"	19	34	49	65	96
3/4"	9"	19	34	50	65	97
1"	11"	19	34	50	65	97
1 1/4"	13 5/8"	19	33	50	65	95

Chart C – IMC Conduit

Conduit Size	Deduct Length	Springback				
		15°	30°	45°	60°	90°
1/2"	7 1/2"	22	38	54	69	100
3/4"	9"	20	36	48	66	98
1"	11"	20	35	52	67	99

NOTE: Springback figures are approximate.

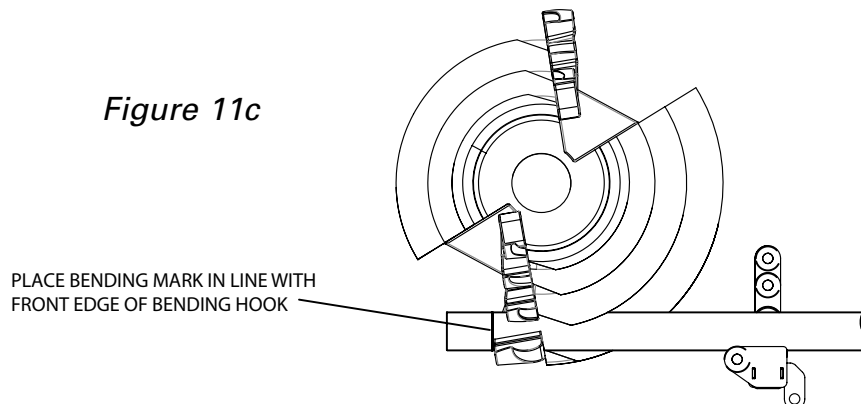
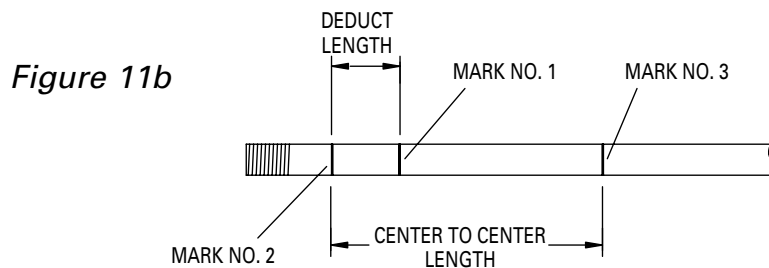
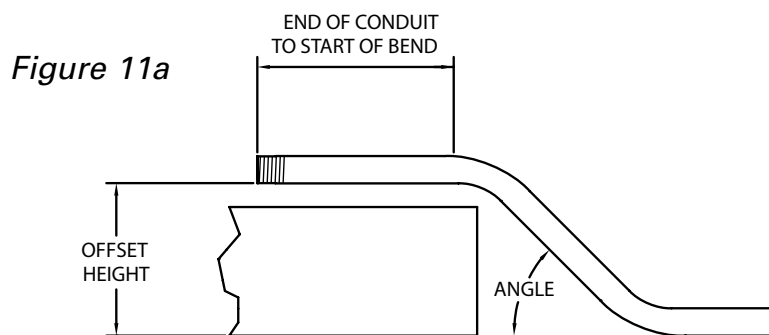
Minimum Stub Length = Deduct Length plus 2"



OFFSET BENDING INFORMATION AND CHARTS

To locate bending marks for a desired offset:

1. Measure distance from end of conduit to start of bend and mark conduit. (Mark 1) See Figure 11b.
2. Refer to chart E (page 12) for measurement "X" and deduct this distance from Mark 1 and place Mark 2 on conduit. See Figure 11b.
3. Refer to chart D (page 12) for center-to-center distance between marks. Measure this distance from Mark 2 and place Mark 3 on conduit. See Figure 11b.
4. Layout of bends is now complete. Next, place Mark 2 in line with front edge of shoe hook, then check springback chart (page 10) and make first bend. See Figure 11c.
5. Rotate conduit 180 degrees. Place Mark 3 in line with front edge of shoe hook, then check springback chart (page 10) and complete second bend.





continued

CHART D

	15°		30°		45°	
OFFSET HEIGHT	MAX CONDUIT SIZE	CENTER TO CENTER	MAX CONDUIT SIZE	CENTER TO CENTER	MAX CONDUIT SIZE	CENTER TO CENTER
2"	3/4"	7-3/4"				
4"	1-1/4"	15-7/16"	3/4"	7-5/16"		
6"	1-1/4"	23-3/16"	1"	11-15/16"	1/2"	8-5/16"
8"	1-1/4"	30-7/8"	1-1/4"	15-15/16"	1"	11-1/16"
10"	1-1/4"	38-5/8"	1-1/4"	19-15/16"	1-1/4"	13-13/16"
12"	1-1/4"	46-3/8"	1-1/4"	23-15/16"	1-1/4"	16-5/8"
14"	1-1/4"	54-1/16"	1-1/4"	27-15/16"	1-1/4"	19-7/16"
16"	1-1/4"	61-13/16"	1-1/4"	31-15/16"	1-1/4"	22-1/4"
18"	1-1/4"	69-9/16"	1-1/4"	35-15/16"	1-1/4"	25-1/16"
20"	1-1/4"	77-1/4"	1-1/4"	39-15/16"	1-1/4"	27-15/16"
22"	1-1/4"	85"	1-1/4"	43-15/16"	1-1/4"	30-3/4"

FIGURES ARE APPROXIMATE

TO LOCATE THE CENTER TO CENTER DISTANCE OF OFFSET BENDING MARKS OTHER THAN THOSE LISTED IN CHART D, USE THE FOLLOWING MULTIPLIERS: MULTIPLY THE HEIGHT OF THE OFFSET DESIRED BY 3.86 ON 15° BENDS, 2 ON 30° BENDS, AND 1.4 ON 45° BENDS.

CHART E

CONDUIT SIZE	1/2"	3/4"	1"	1-1/4"
"X"	2-1/2	3-1/16	3-1/16	4



OPERATING INSTRUCTIONS — PRINT TABLE

NOTE: Prior to raising the print table, engage the stabilizer leg located underneath the print table on the base of the Bending Work Station. To engage, fully extend the stabilizer leg and rotate to the floor.

TO RAISE THE PRINT TABLE:

1. Pull the spring latch (see Figure 13a).
2. Lift the print table from the bottom until the print table stops. Then, slowly lower the print table until the linkage pins rest in the bottom of the J-slots on both sides of the print table.

CAUTION

ALWAYS ensure the linkage pins are fully engaged on both sides before using the print table.

WARNING

ALWAYS lower and secure the print table with the spring latch prior to moving or transporting the Bending Work Station. ALWAYS retract the stabilizer leg prior to moving or transporting the Bending Work Station.

TO LOWER THE PRINT TABLE:

1. Lift the print table with one hand while raising the linkage arm with the other hand. Slowly lower the table.
2. Once lowered, secure the print table with the spring latch.

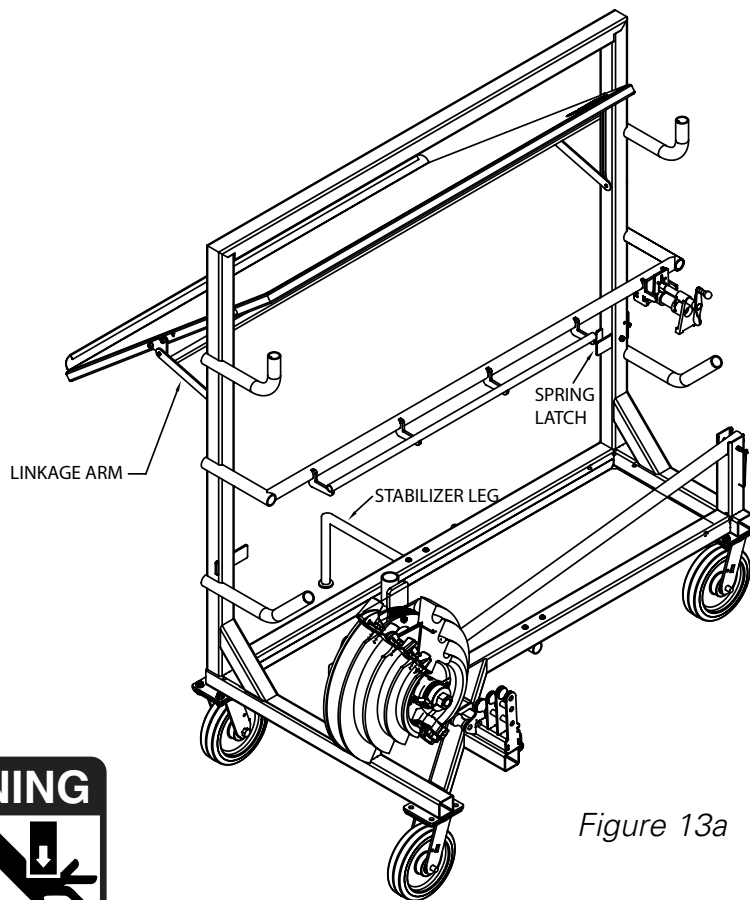


Figure 13a



TRANSPORTING

! WARNING

ALWAYS lower and secure the print table with the spring latch prior to moving or transporting the Bending Work Station.

BEFORE TRANSPORTING:

1. Lower the print table by lifting the print table with one hand while raising the linkage arm with the other hand. Slowly lower the table.
2. Once lowered, secure the print table with the spring latch.
3. Retract the stabilizer leg.
4. Remove any conduit from the bending shoe.
5. Remove the ratchet handle from the ratchet arm and store. See Figure 14b.
6. Unlock the swivel casters.
7. The Bending Work Station is now ready for transport.

Figure 14a

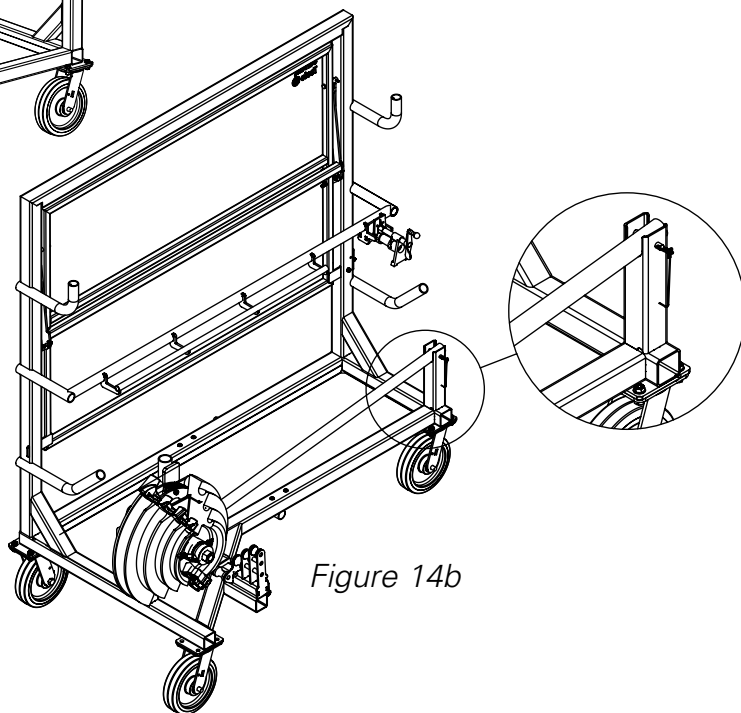
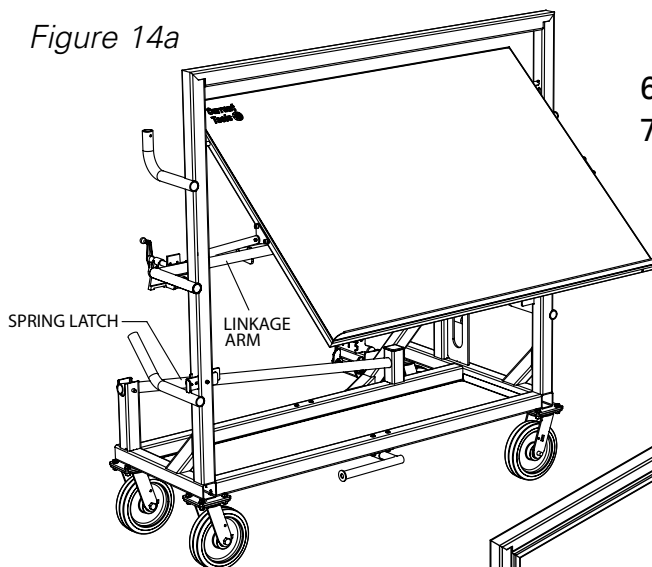
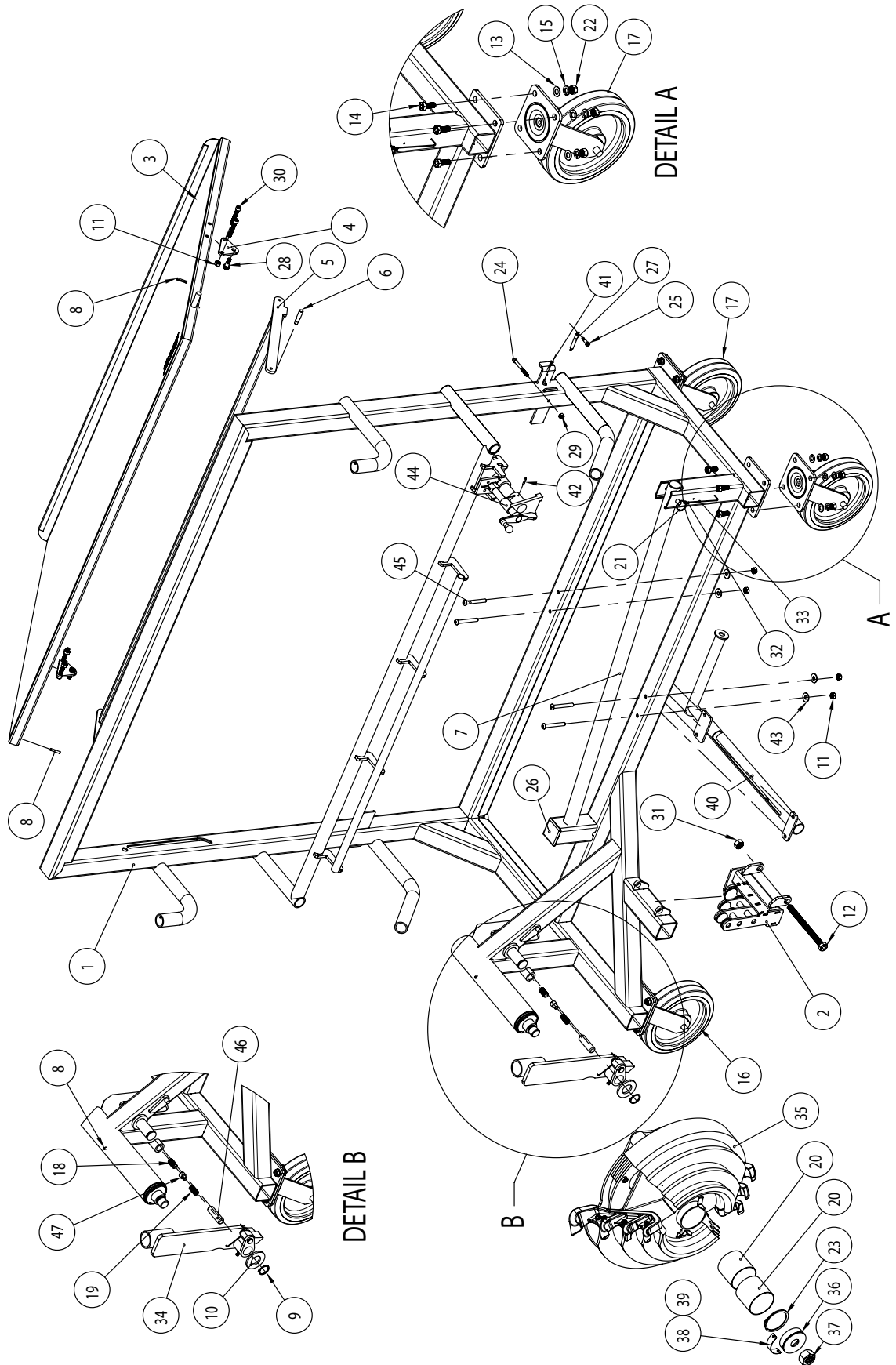


Figure 14b

MAINTENANCE

Monthly: Apply multi-purpose grease at grease fitting. See item #42 on Exploded View on page 15.

EXPLODED VIEW





PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	752-066	CART	1
2	752-054	ROLLER SUPPORT	1
3	752-024	PRINT TABLE	1
4	752-017	LINKAGE BRACKET	2
5	752-053	LINKAGE ARM	1
6	752-036	LINKAGE PIN	2
7	752-047	RATCHET HANDLE	1
8	747-18	3/16 X 1 LG ROLL PIN	3
9	750-20	1" RETAINER RING	1
10	750-394	1" WASHER	1
11	2-1301-4	5/16-18 HEX NUT (NYLON INSERT)	8
12	752-103	1/2-13 X 6 LG HEX BOLT	1
13	506-3	3/8 USS FLAT WASHER	13
14	524-11	3/8-16 X 1" HHCS	13
15	452-27	3/8 LOCK WASHER	13
16	752-104	CASTER - SWIVEL	2
17	752-105	CASTER - FIXED	2
18	751-10	SET SCREW	1
19	750-9	SPRING	1
20	77-013A	SLEEVE BEARING	2
21	9548-7	PIN-QUICK RELEASE	1
22	452-28	3/8 HEX NUT	13
23	77-007	2-7/16" RETAINER RING	1
24	752-106	1/4-20 X 2-1/4 LG SHCS	1
25	752-109	1/4 X 1/2 LG SHOULDER BOLT	1
26	752-107	PLASTIC CAP	1
27	752-108	EXTENSION SPRING	1
28	752-100	3/8 X 3/8 LG SHOULDER BOLT	2
29	9518SR-12	1/4 HEX NUT (NYLON INSERT)	1
30	752-101	5/16-18 X 1-3/4 LG SHCS	4
31	333-7	1/2 HEX NUT (NYLON INSERT)	1
32	670-6	FERRULE-DOUBLE	2
33	99-80	STEEL CABLE, 1/16OD X 8" LG	1
34	752-068	RATCHET ARM ASSEMBLY	1
35	752-060	SHOE ASSEMBLY	1
36	750-348	CAP-DEGREE INDICATOR	1
37	750-18	NUT-LOCK, 7/8-10	1
38	750-456	GRADUATED PLATE	1
39	750-17D	RIVET-1/8 X 3/16 LG ALUM	2
40	752-079	STABILIZER ASSEMBLY	1
41	752-016	BOARD SLIDE	1
42	77-035A	ROLL PIN 1/8" X 3/4"	1
43	9544-21	5/16" FLAT WASHER - USS	1
44	752-128	WISE	1
45	752-111	BUTTON HD. CAP SCREW 5/16-18 X 2 3/4"	4
46	751-419	SPACER	1
47	750-294	PLUG	2