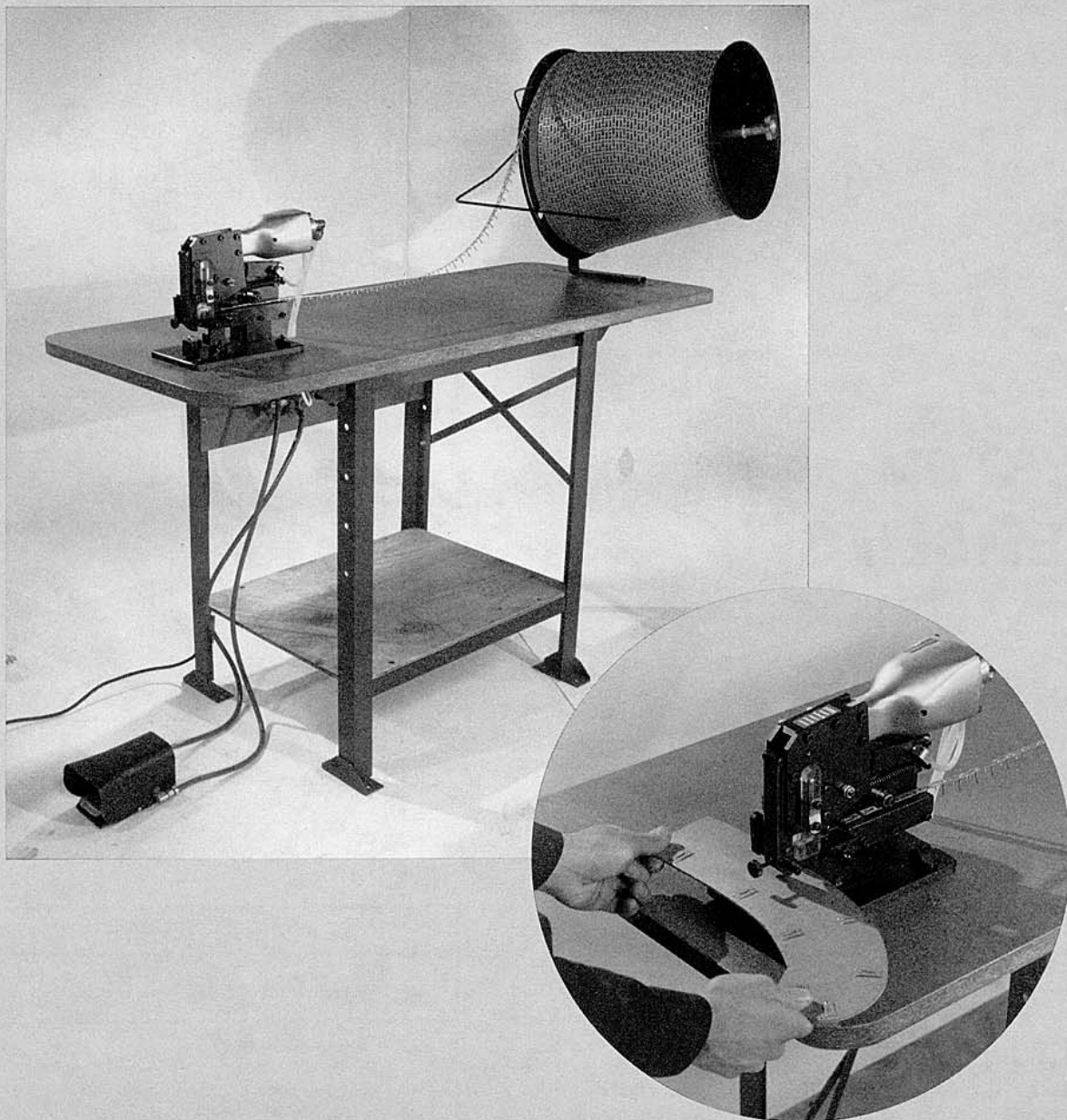


THE
HARTCO
UPHOLSTERY PANEL
LOCKNAIL
SYSTEM

INSTRUCTION and PARTS MANUAL



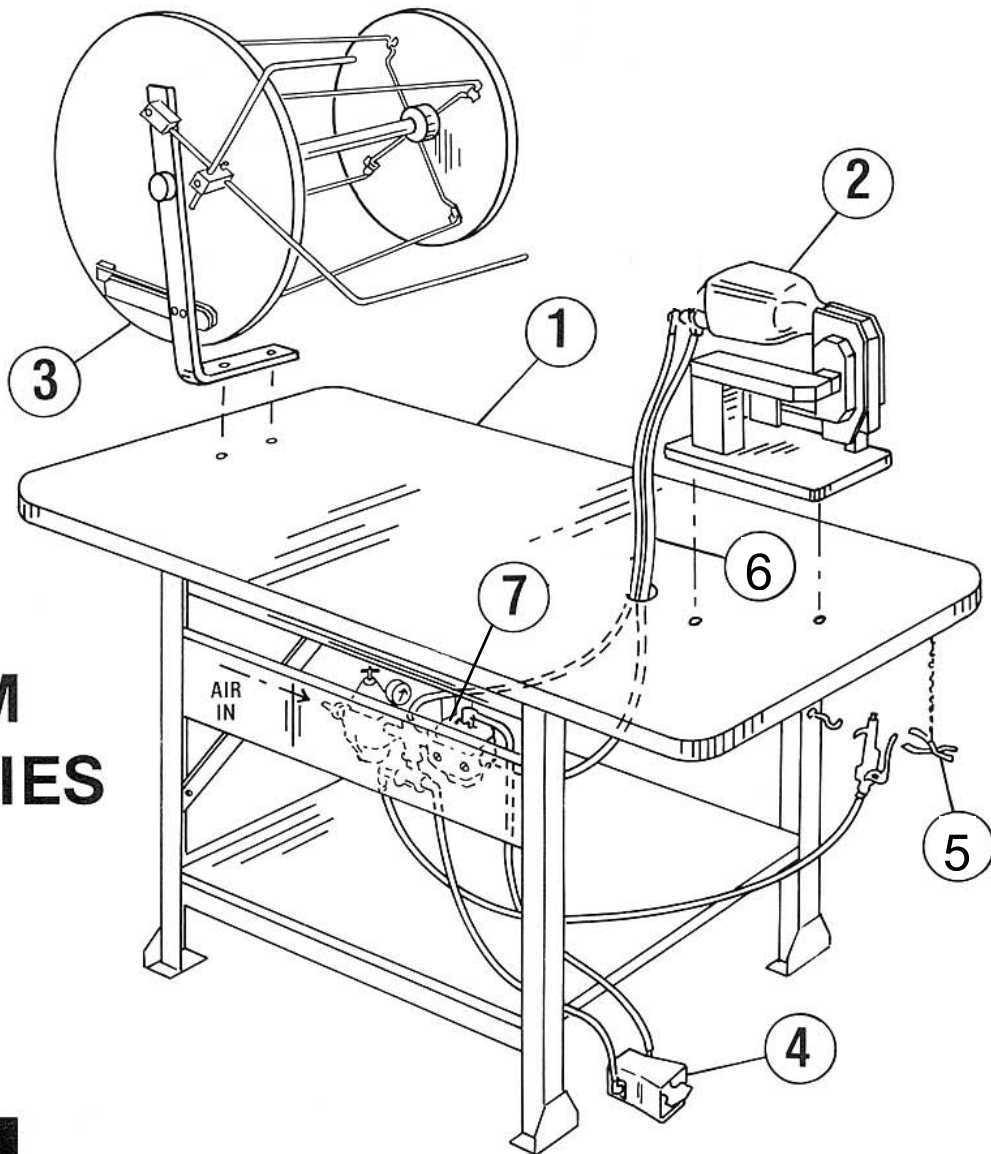
HARTCO®

REV. B 02-03-2005

GENERAL INFORMATION

The Locknail System consists of the following components:

- A. Locknail Driving Head and Feed Mechanism.
- B. Locknail Dispenser.
- C. Foot Control Valve.
- D. Table with air supply.



SYSTEM ASSEMBLIES

LOADING

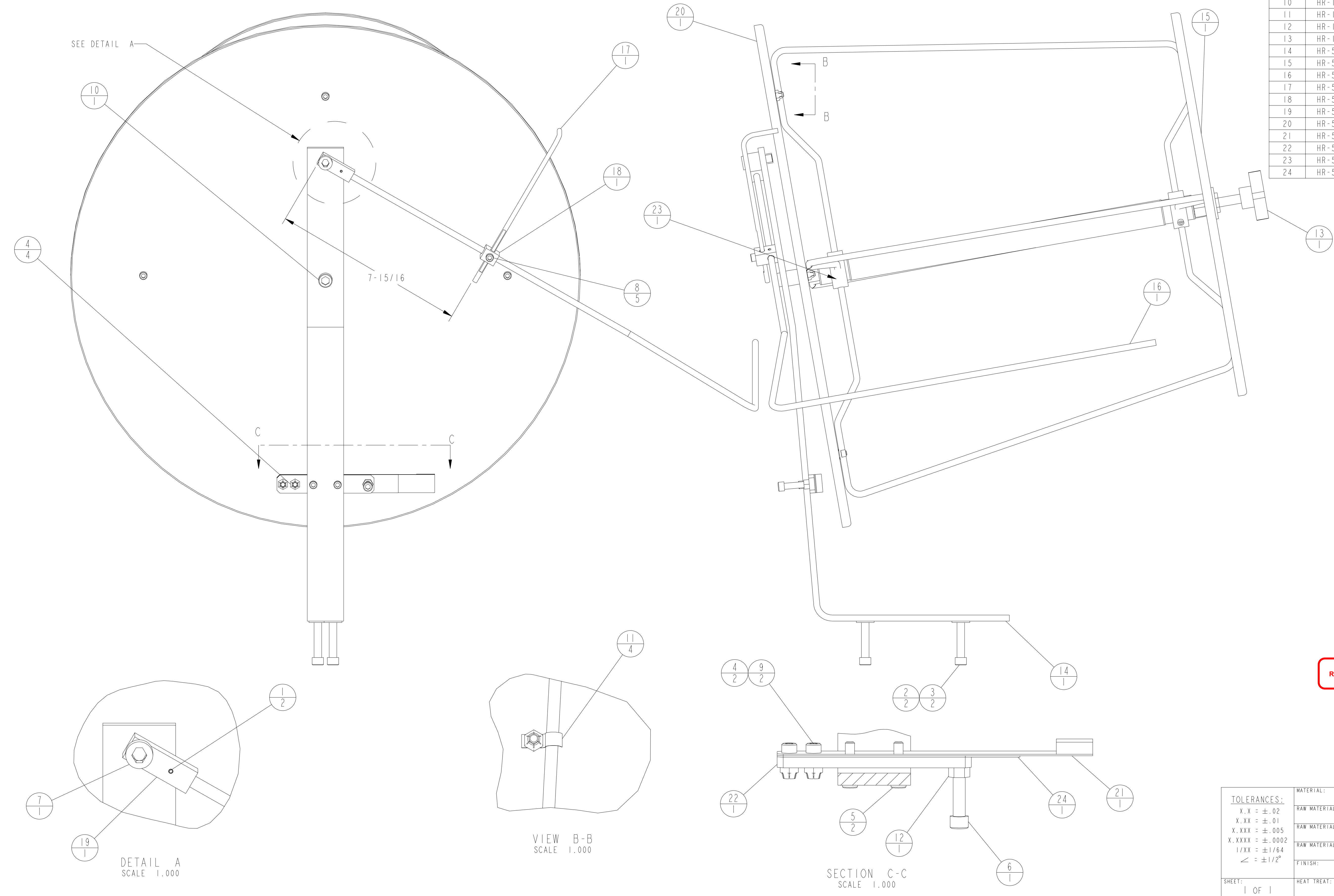
LOADING

1. Remove the hand knob and flange from the Dispenser to load Locknail Coils.
2. Slide the Locknail cone on to the Dispenser and replace the flange and hand knob to secure the Locknails in place before removing the packaging tape and wire tie.
3. Locate the free end of the Locknail coil and feed the Locknails under the slack and brake arm onto the Locknail rails. The Locknails are to engage the front plate of the driving head by cocking the pawl.

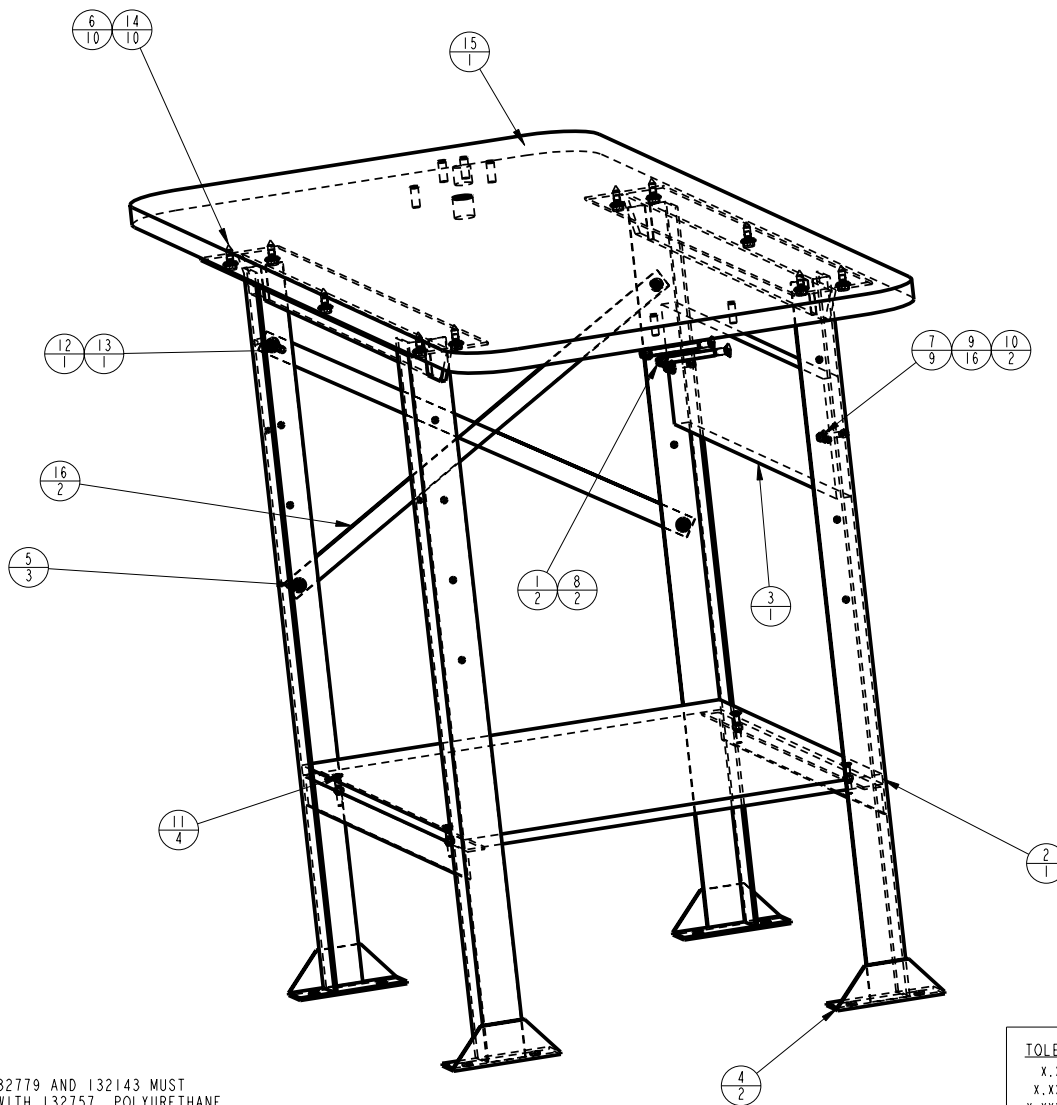
PARTS LIST

IDENT. NO.	PART NAME	PART NO.
1	Table Assembly	55359
2	Locknail Tool	55260
3	Dispenser Assembly	55344
4	Foot Valve	65154
5	Pliers Assembly	132142
6	Air Lines Assembly	132141
7	Air Supply Assembly	131958

Assembly BOM			
Index	Part No.	Quantity	Description
1	HR-15002	2	PIN, ROLL 3/32 x 1/2
2	HR-15018	2	5/16 FLAT WASHER, 1/16 THICK
3	HR-15040	2	5/16-18 x 1.75 SHCS
4	HR-15044	6	10-24 FLEXLOC NUT
5	HR-15050	2	10-24 x 3/4 SHCS
6	HR-15063	1	SHCS 1/4-20 x 1-1/4
7	HR-15072	1	SHOULDER BOLT 5/16 X 1/2
8	HR-15110	5	10-24 x 3/8 SHCS
9	HR-15187	2	SHCS 10-24 x 1/2
10	HR-15253	1	SHCS 3/8-16 X 1
11	HR-15258	4	1/4 PIPE CLAMP
12	HR-15259	1	STANDARD NUT 1/4-20
13	HR-15299	1	GUIDE KNOB
14	HR-55332	1	DISPENSER BRKT
15	HR-55334	1	REMOVABLE FLANGE
16	HR-55335	1	SLACK ARM
17	HR-55336	1	BRAKE ARM
18	HR-55337	1	UNION BLOCK
19	HR-55338	1	PIVOT BLOCK
20	HR-55339	1	ASSEMBLY, FIXED FLANGE
21	HR-55341	1	ASSEMBLY, FELT BRAKE
22	HR-55342	1	BRAKE MOUNT
23	HR-55343	1	ASSEMBLY,SPOKE
24	HR-55432	1	BRAKE STIFFENER



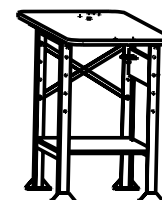
TOLERANCES: X.X = ±.02 X.XX = ±.01 X.XXX = ±.005 X.XXXX = ±.0002 1/XX = ±1/64 ∠ = ±1/2°	MATERIAL:		STANLEY		HARTCO	
	RAW MATERIAL PART NUMBER:		7707 AUSTIN AVE., SKOKIE, IL, USA			
	RAW MATERIAL DIMENSIONS:		PART DESCRIPTION:			
	RAW MATERIAL WEIGHT:		DISPENSER ASSEMBLY			
SHEET: I OF I	FINISH:		SCALE: 0.500	DRAWN BY: DA		PART NUMBER: HR-55344
	HEAT TREAT:		REVISION: A	DATE: 09/04/02		



SCALE 0.225

NOTE:

HR-55350, 132779 AND 132143 MUST
BE STAINED WITH 132757, POLYURETHANE.

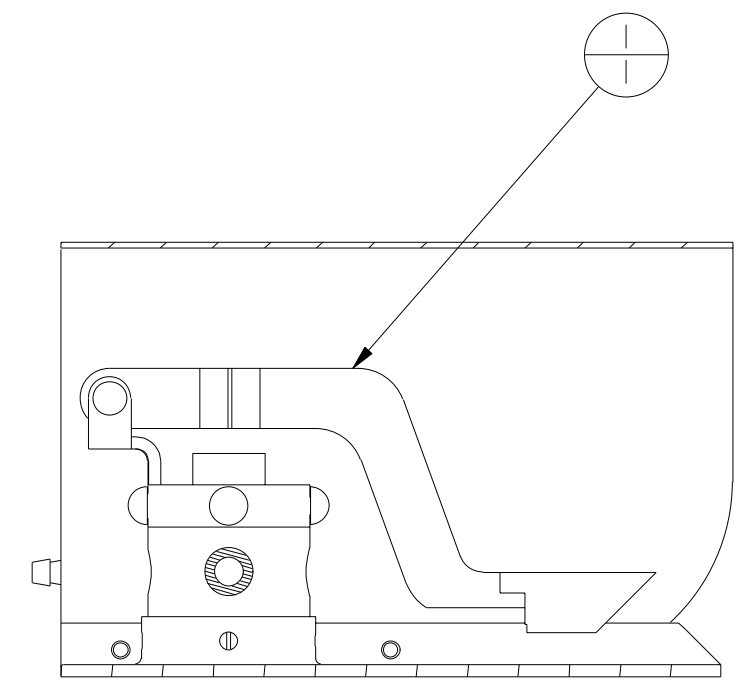
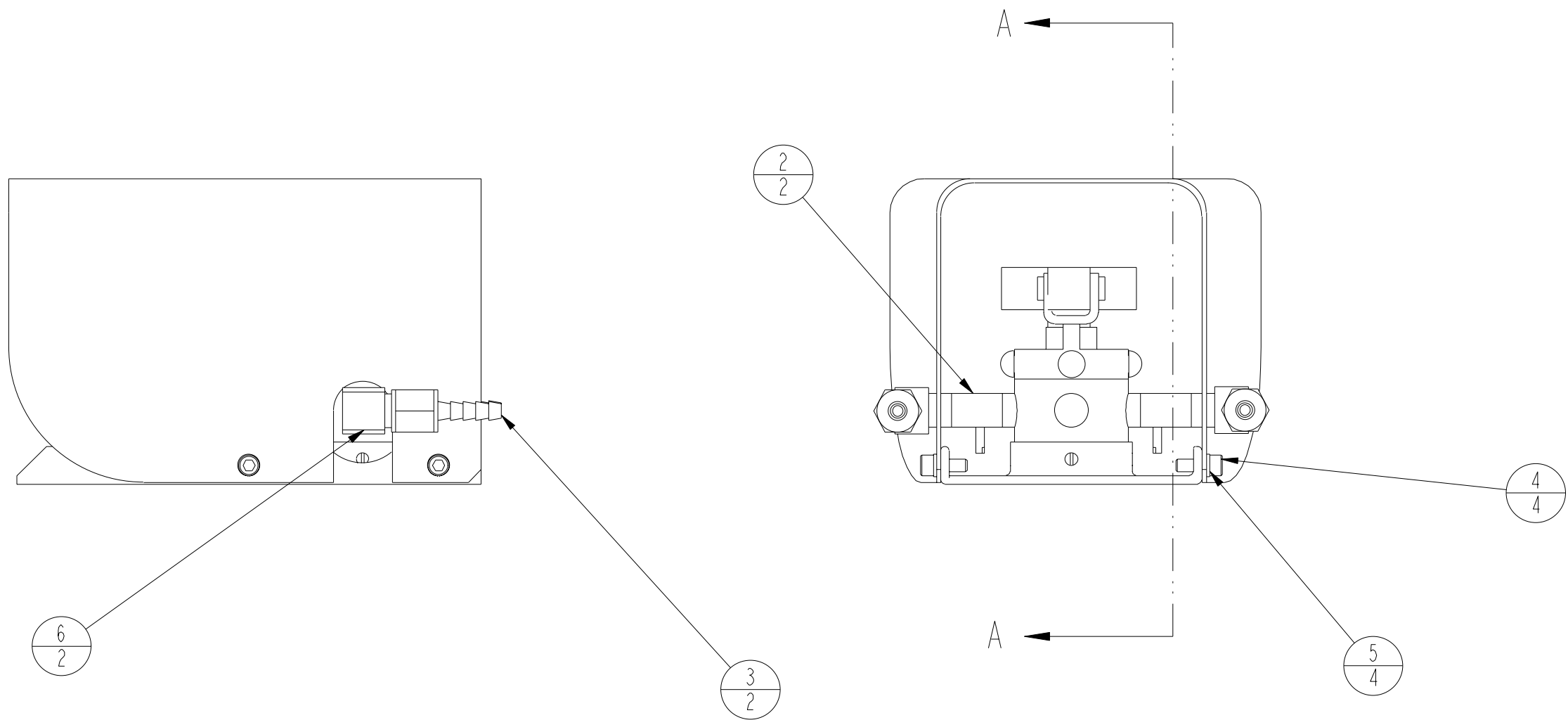


SCALE 0.050

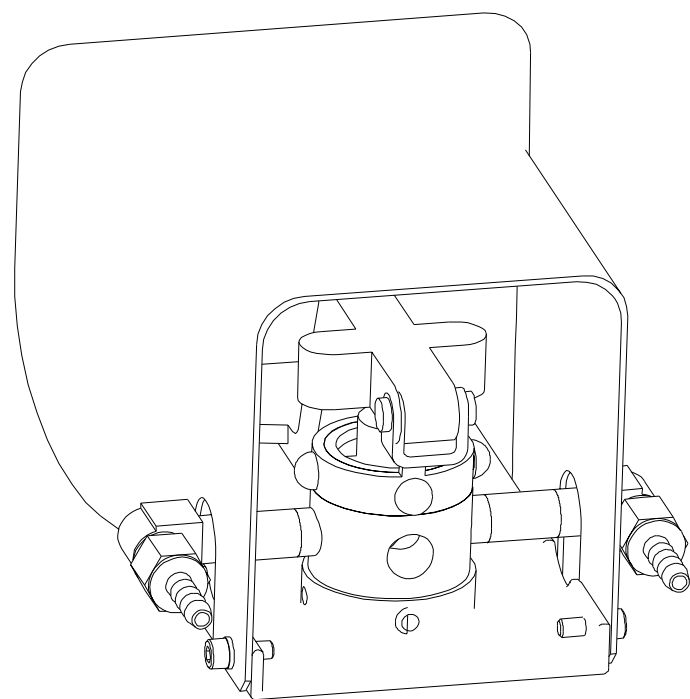
**FOR
REFERENCE
ONLY**

Assembly BOM			
Index	Part No.	Quantity	Description
1	132140	2	FHCS 5/16-18 X 3 1/2
2	132143	1	PLYWOOD SHELF 1/2 X 48 X 96
3	132779	1	ASSEMBLY, VALVE MOUNT
4	HR-10569	2	POLLARD STEEL LEGS 200-3635
5	HR-15001	3	SHCS 1/4-20 x 3/4
6	HR-15018	10	5/16 FLAT WASHER, 1/16 THICK
7	HR-15023	9	1/4-20 FLEXLOC NUT
8	HR-15046	2	5/16-18 FLEXLOC NUT
9	HR-15047	16	WASHER 1/4 I.D. X 1/16
10	HR-15063	2	SHCS 1/4-20 x 1-1/4
11	HR-15066	4	FHSCS 1/4-20 x 1
12	HR-15259	1	STANDARD NUT 1/4-20
13	HR-15779	1	HOOK
14	HR-16098	10	5/16 X 1 LG. LAG SCREW
15	HR-55350	1	TABLE TOP 1 X 24 X 60 PARTICLE WOOD
16	HR-56106	2	TABLE BRACE, LN

TOLERANCES: X.X = $\pm .02$ X.XX = $\pm .01$ X.XXX = $\pm .005$ X.XXXX = $\pm .0002$ 1/XX = $\pm 1/64$ $\angle = \pm 1/2^\circ$		MATERIAL: RAW MATERIAL PART NUMBER: RAW MATERIAL DIMENSIONS: RAW MATERIAL WEIGHT: FINISH: SCALE: 0.250 DRAWN BY: TF DATE: 5/14/03 PART NUMBER: HR-55359	
		STANLEY HARTCO 7707 AUSTIN AVE., SKOKIE, IL, USA ASSEMBLY, LOCK NAIL TABLE	
		SHEET: 1 OF 1 HEAT TREAT: REVISION: A	



SECTION A-A

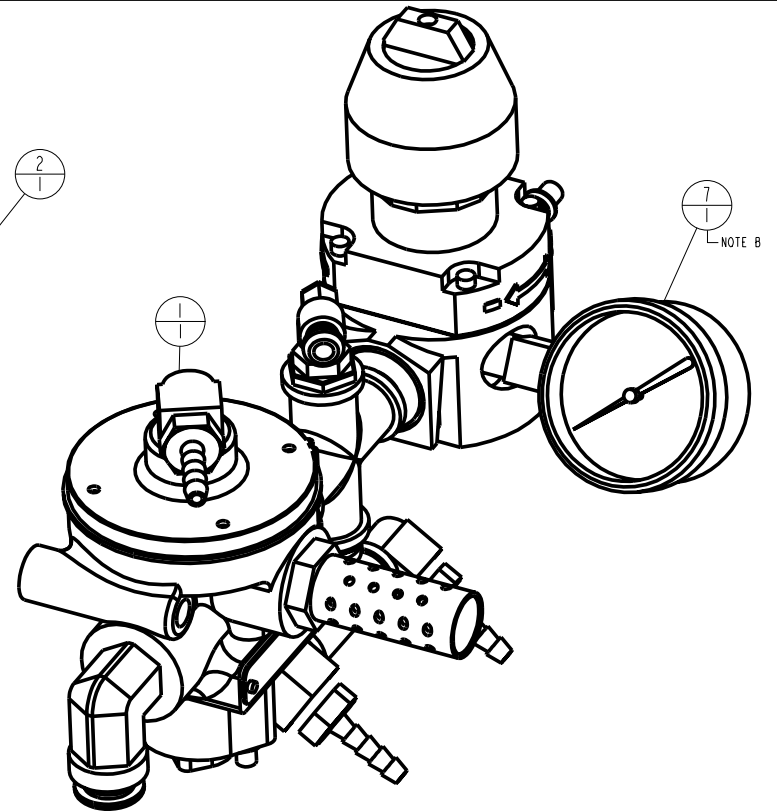
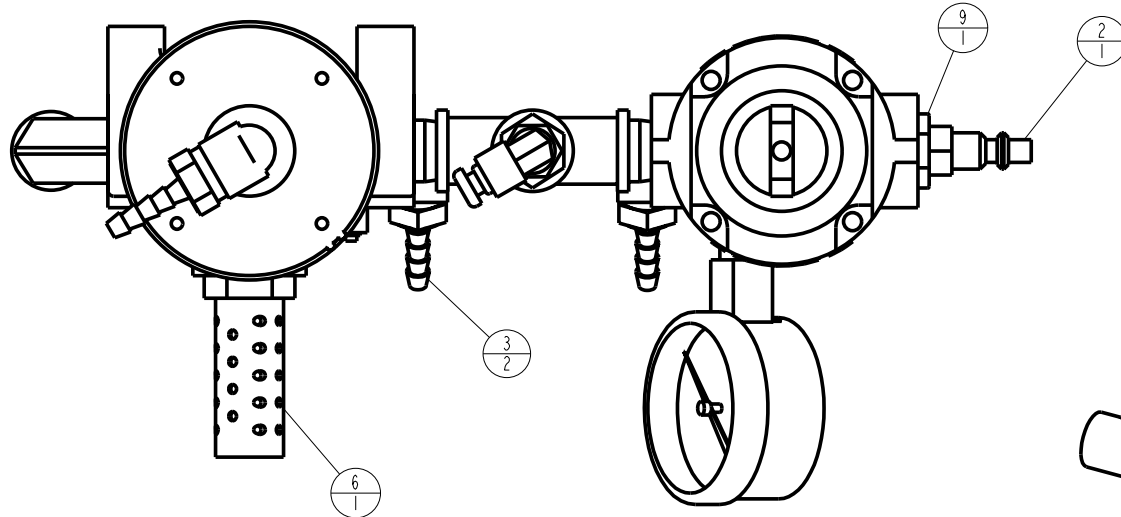


GENERAL VIEW OF FOOT CONTROL VALVE

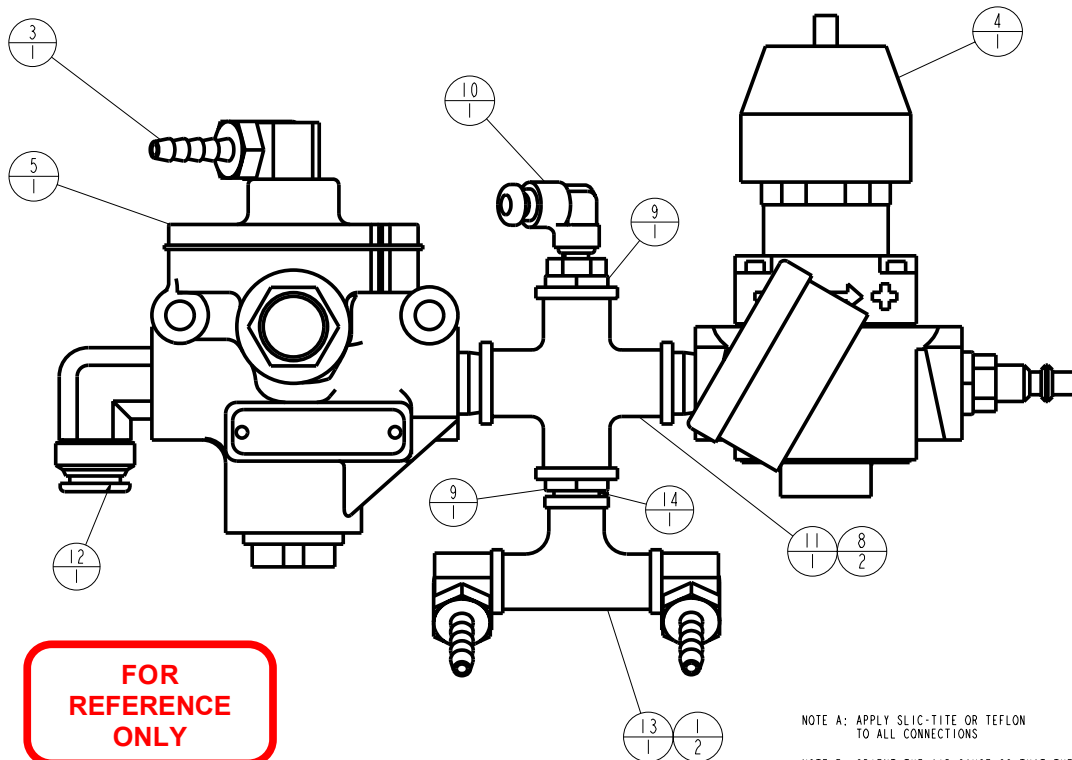
FOR
REFERENCE
ONLY

Assembly BOM			
Index	Part No.	Quantity	Description
1	15303	1	FOOT PEDAL
2	15340	2	PIPE NIPPLE 1/4 X 2
3	15341	2	HOSE BARB 1/4 X 1/4
4	HR-15021	4	SHCS 10-32 x 1/2
5	HR-15033	4	#10 LOCK WASHER
6	HR-15034	2	STREET EL 1/4

TOLERANCES: X.X = ±.02 X.XX = ±.01 X.XXX = ±.005 X.XXXX = ±.0002 1/XX = ±1/64 ∠ = ±1/2°	MATERIAL:	STANLEYHARTCO 7707 AUSTIN AVE., SKOKIE, IL, USA		
	RAW MATERIAL PART NUMBER:	PART DESCRIPTION:		
	RAW MATERIAL DIMENSIONS:			
	RAW MATERIAL WEIGHT:	ASSEMBLY, FOOT PEDAL		
	FINISH:	SCALE:	DRAWN BY:	PART NUMBER:
HEAT TREAT:	0.500	JAM	HR-65154	
	REVISION:	DATE:		
	A	9/19/02		



GENERAL VIEW OF AIR SYSTEM ASSEMBLY



FOR
REFERENCE
ONLY

NOTE A: APPLY SLIC-TITE OR TEFLON
TO ALL CONNECTIONS

NOTE B: ORIENT THE AIR GAUGE SO THAT THE
OPERATOR CAN READ DURING OPERATION.

Assembly BOM

Index	Part No.	Quantity	Description
1	HR-15034	3	STREET EL 1/4
2	HR-15202	1	1/4 X 1/4 NPT NIPPLE
3	HR-15207	3	1/4 X 1/4 NPT NIPPLE
4	HR-15295	1	AIR REGULATOR
5	HR-15302	1	POPPET VALVE
6	HR-15310	1	MUFFLER
7	HR-15338	1	AIR GAUGE
8	HR-15407	2	NIPPLE 3/8 NPT X 1
9	HR-15414	3	HEX PIPE BUSHING 3/8 X 1/4
10	HR-15468	1	AIR LINE FITTING, 1/4 NPT X 1/4 O.D., 90 DEG.
11	HR-15739	1	3/8 FEMALE CROSS
12	HR-15851	1	AIR LINE FITTING, 3/8 NPT X 1/2 O.D., ELBOW
13	HR-15951	1	1/4 NPT FEMALE TEE
14	HR-16082	1	PIPE 1/4 NPT CLOSED NIPPLE

TOLERANCES:

X.X = ±.02
X.XX = ±.01
X.XXX = ±.005
X.XXXX = ±.0002
1/XX = ±1/64
< = ±1/2"

MATERIAL:

NONE

RAW MATERIAL PART NUMBER:

NONE

RAW MATERIAL DIMENSIONS:

NONE

RAW MATERIAL WEIGHT:

NONE

FINISH:

NONE

HEAT TREAT:

NONE

STANLEY

HARTCO

7707 AUSTIN AVE., SKOKIE, IL, USA

PART DESCRIPTION:

ASSEMBLY, AIR SUPPLY

SCALE:

1.000

DRAWN BY:

EMC

REVISION:

A

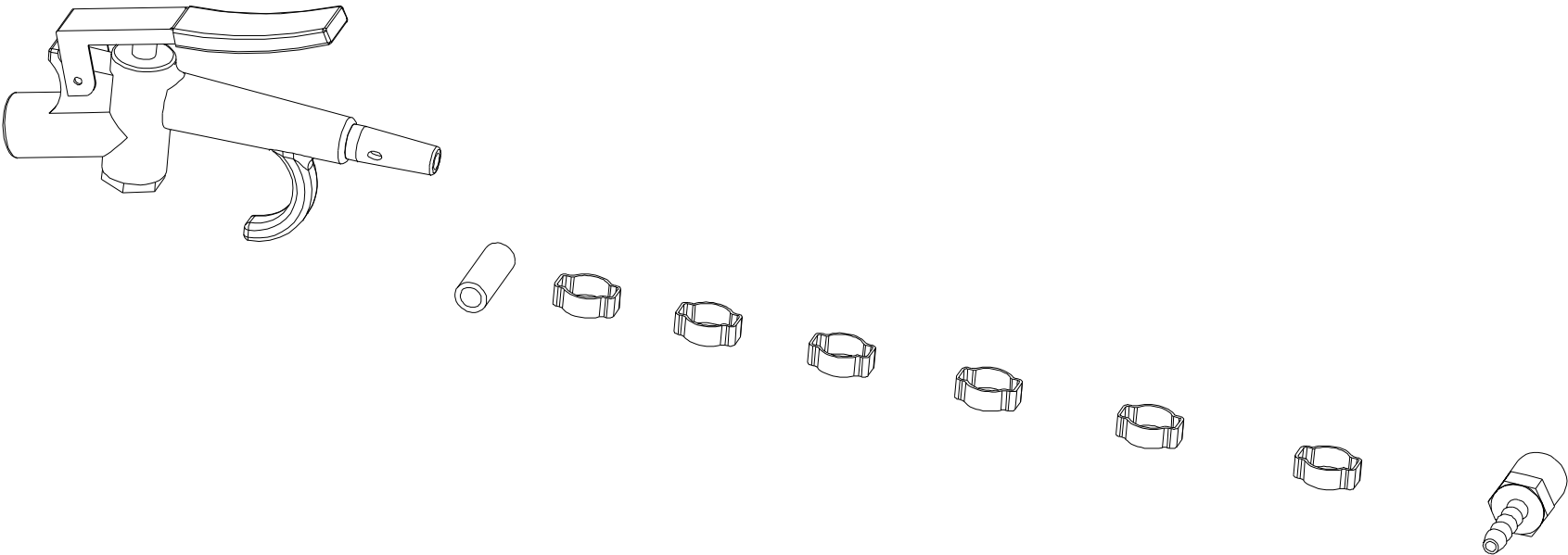
DATE:

5/12/03

PART NUMBER:

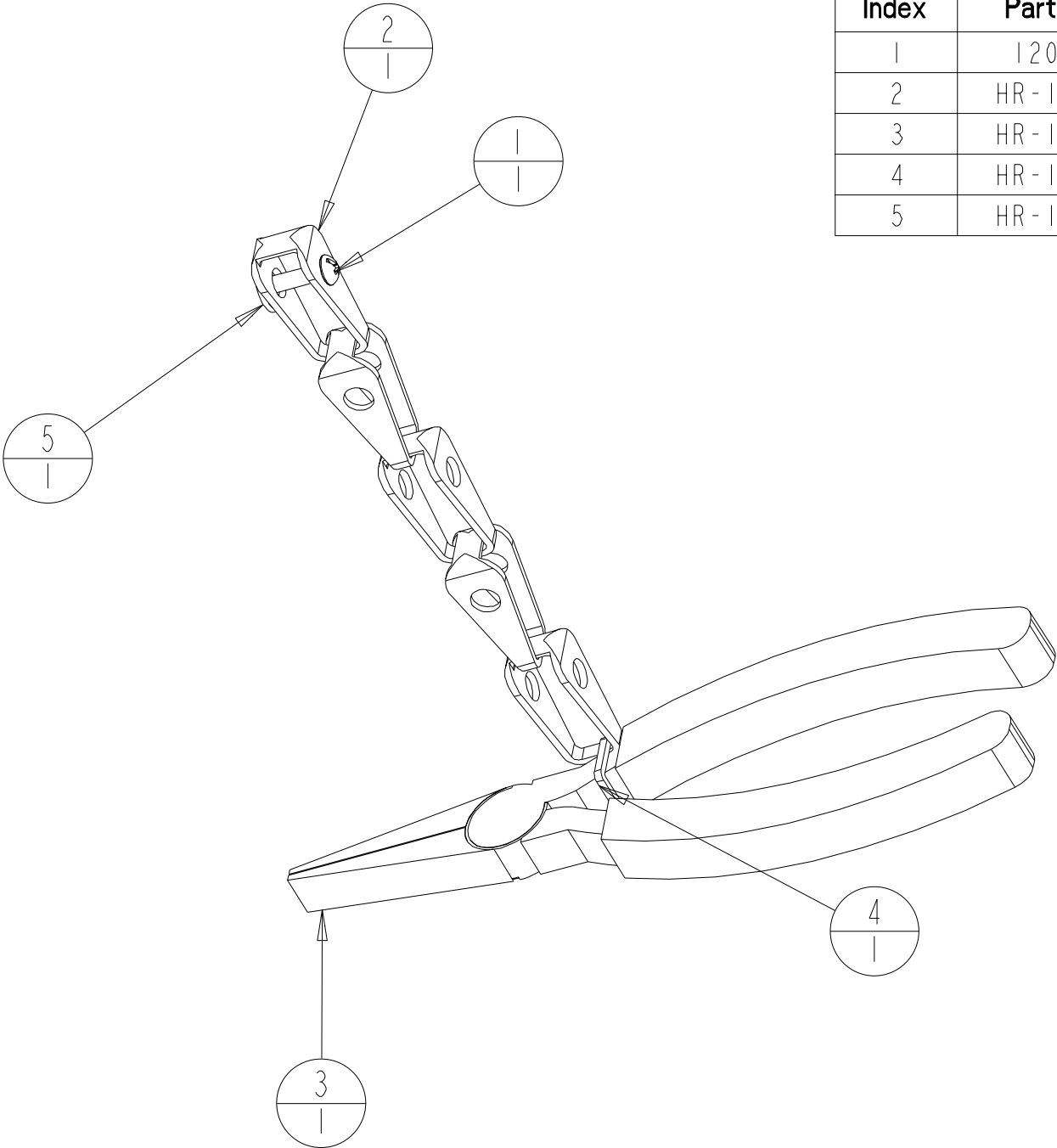
131958

Assembly BOM			
Index	Part No.	Quantity	Description
1	HR-15207	1	1/4 X 1/4 NPT NIPPLE
2	HR-15209	6	1/4 HOSE CLAMP
3	HR-15312	1	AIR GUN
4	HR-15717	1	TUBING, 1/4" NYLON 2.00 FT. LG.
5	HR-15718	1	TUBING, 1/2" NYLON 2.00 FT. LG.
6	HR-15953	1	1/4 GRAY AIR HOSE 13.50 FT. LG.



FOR
REFERENCE
ONLY

<u>TOLERANCES:</u> X.X = ±.02 X.XX = ±.01 X.XXX = ±.005 X.XXXX = ±.0002 1/XX = ±1/64 ∠ = ±1/2°	MATERIAL:	STANLEYHARTCO 7707 AUSTIN AVE., SKOKIE, IL, USA		
	RAW MATERIAL PART NUMBER:			
	RAW MATERIAL DIMENSIONS:			
	RAW MATERIAL WEIGHT:	PART DESCRIPTION: AIR LINES ASSEMBLY		
	FINISH:	SCALE: 0.500	DRAWN BY: EMC	PART NUMBER: 132141
	HEAT TREAT:	REVISION: A	DATE: 1/27/03	



Assembly BOM			
Index	Part No.	Quantity	Description
1	120805	1	SHEET METAL SCREW #6 X 3/4
2	HR-10584	1	CHAIN - 16"
3	HR-15280	1	PLIERS
4	HR-15666	1	TIE, 7-1/2" CABLE
5	HR-15747	1	#10 FLAT WASHER

FOR
REFERENCE
ONLY

TOLERANCES:

X.X = ±.02
X.XX = ±.01
X.XXX = ±.005
X.XXXX = ±.0002
1/XX = ±1/64
∠ = ±1/2°

MATERIAL:	STANLEY HARTCO		
RAW MATERIAL PART NUMBER:	7707 AUSTIN AVE., SKOKIE, IL, USA		
RAW MATERIAL DIMENSIONS:	PART DESCRIPTION:		
RAW MATERIAL WEIGHT:	ASSEMBLY, PLIERS		
FINISH:	SCALE: 0.750	DRAWN_BY: EMC	PART NUMBER: 132142
HEAT TREAT:	REVISION: A	DATE: 12/13/02	

OPERATION and LOCKNAIL APPLICATION PROCEDURE

1. The Locknail machine requires 60 psi air pressure. Higher air pressure may result in tool damage and inconsistent driving of the Locknail shank.
2. The driving head is equipped with two panel guides to control the distance from the panel edge to the Locknail. One guide is located on the left side of the driving head and the other guide to the rear of the crimping insert where the Locknail is inserted into the panel. Using the side guide, the panel is moved through the driving head from front to rear and when using the rear guide, the panel is moved from right to left.
3. The operator places the panel between the driving head and crimping insert. Locknails are applied with the foot control as the panel is moved through the driving head. The foot control pedal must be depressed completely to assure a full tool cycle and consistent Locknail feed.
CAUTION — If tool is short cycled, the Locknail will short feed and not fully enter under the driving blade causing jams.
IMPORTANT
4. Restart jammed Locknails by making a clean break at the intersection of the Locknails. This assures the intersection of the Locknail lines up with the blade cut off.

MAINTENANCE

1. Lubricate the blade with SAE 30 oil daily or Lubriplate 130 AAA grease.
2. The Locknail feed mechanism should be checked daily for freedom. If dry, it should be oiled lightly with SAE 30 oil.
3. Tighten bolts as necessary.
4. Once a month or as necessary, the front plate and blade should be removed, cleaned thoroughly and lubricated with Lubriplate 130 AAA grease.

TROUBLE SHOOTING INFORMATION

PROBLEM	CAUSE	REMEDY
1. Locknails do not feed consistently.	Pawl spring broken. Locknail caught at Dispenser. Stop pawl not engaged. Blade does not return.	Replace. Check for free movement of Dispenser. Check for stop pawl spring tension. Replace o-rings and lubricate.
2. Driving head does not fire.	Ross valve will not operate. Foot control pilot valve will not operate.	Replace poppet valve with repair kit. Replace pilot valve.
3. Locknail jams.	Foot control is short cycled and Locknail short feeds.	Depress foot control pedal completely to assure a full tool cycle and Locknail feed.
4. Locknail shank deflects or bends when applied to board.	Blade is dry Front plate spring pad catches Locknail.	Lubricate. Check pad freedom. Clean and lubricate, replace worn roll pins.

LOCKNAIL SIZES AND PACKAGING

SIZE	LOCKNAILS PER COIL	COILS PER SKID	LOCKNAILS PER SKID
LN-2 — 3/4" long	2500	40	100,000
LN-3 — 15/16" long	2500	40	100,000

HARTCO®

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FAX: (847) 967-9808

Hartco machines and clips are covered by U.S. and International patents.
U.S. Patents Nos. 3,613,878; 3,641,656; 3,647,593; 4,102,586; 4,189,523;
4,224,731; 4,508,220; 4,546,528; 4,724,590; 4,062,087; 4,244,731
Other patents pending.

