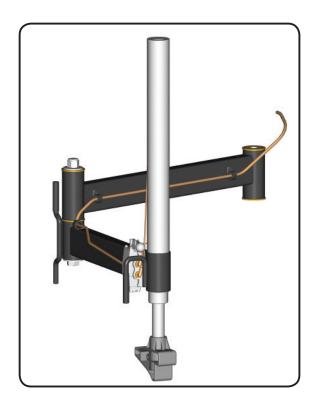


Robo-Arm® Kit 85009937

For use with COATS Rim Clamp® Tire Changers



This is a supplement to your operating manual and covers the installation and use of the Robo-Arm®. If you do not have your original operating manual, please call COATS at 1-800-688-6359 to request an additional copy.

Installation Instructions Operating 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.

Revision:

Installation Instructions

1. Before beginning any work, clear the area and position the machine for easy access. Disconnect all power sources, both air and electricity inputs. Allow any stored air in the reservoir to escape by depressing the inflate valve.

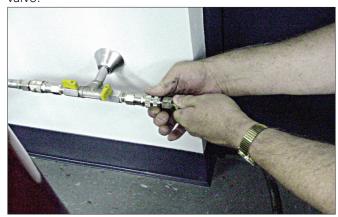


Figure 1 - Disconnect power and air sources.

2. Verify the stored air pressure is zero by observing the air pressure gauge on top of the tower (see photo). Next with a 1 1/16-inch socket wrench, remove the manifold with the gauge and safety valve.

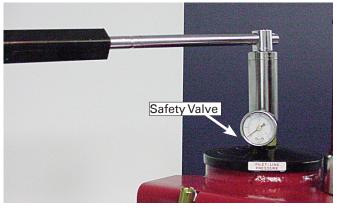


Figure 2 - Remove manifold with gauge and safety valve.

3. Next install the included manifold with the gauge and safety valve plus a barbed hose fitting. Tighten until the barbed fitting is located as shown in photo.



Figure 3 - Install manifold, safety valve and barbed fitting.

4. Next, remove nut on the bolt supporting the swing arm pivot system. With the new 10 3/4-inches (273 mm) long bolt push the old bolt out with the new bolt. Make sure the small washer is on the head of the new bolt.

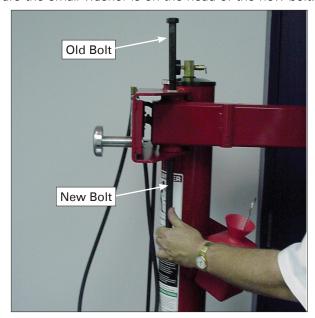


Figure 4 - Use new long bolt to push old bolt out.

5. Next, install the large plated spacer, the swing arm (note position of the decal) with pivot pin spacer, and the lock nut. Next using large wrenches, tighten the assembly to **240 ft. pounds torque** (very tight). Even though the bolt is very tight, the assembly should rotate easy.

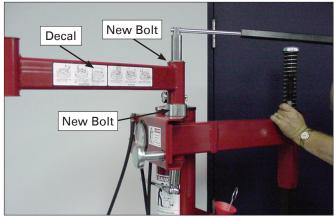


Figure 5 - Tighten swing arm to rotate.

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6. Locate arm with cylinder, install 7-inch bolt with head through the bottom side, slide pivot pin over bolt and attach nut with only one turn.

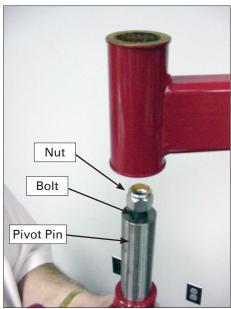


Figure 6 - Locate and position arm with cylinder.

7. Slide the cylinder arm through the swing arm bushing, hold in position, remove nut and place washer over bolt threads and assemble nut to bolt.



Figure 7 - Hold swing arm in position to install nut to bolt

8. Next, using large wrenches, tighten the assembly to **240 ft. pound torque** (very tight). Again, even though the bolt is very tight, the assembly should be free to rotate.



Figure 8 - Tighten the swing arm bolt.

9. Slide the robo cylinder through the cylinder arm bushing, aligning the robo cylinder for set screw installation. Tighten the set screw.

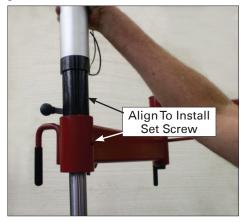


Figure 9 - Slide cylinder through cylinder arm bushing.

10. Install the external snap ring.

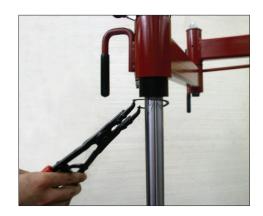


Figure 10 - Install external snap ring.

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11. Grease the steel ball and place it in the bottom of the helper tool.



Figure 11 - Place greased ball in bottom of helper tool.

12. Install the helper tool on the cylinder shaft using the roll pin.

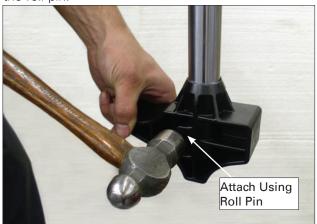


Figure 12 - Install the helper tool on the cylinder shaft.

13. Connect 1/8-inch nylon tubes from robo cylinder to cylinder arm valve fittings, as shown in figure 13.d

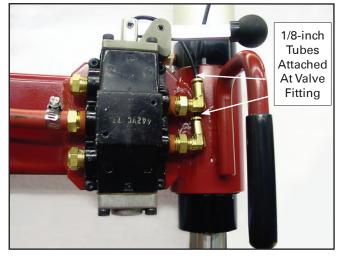


Figure 13 - Connect nylon tubes.

14. Next, unwrap the hose from valve, guide through hose clamps; and, with the hose pushed over the barbed fitting, tighten hose clamps.

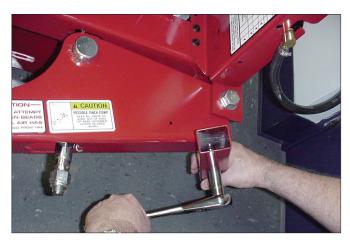


Figure 14 - Route hose and tighten hose clamps.

15. For installing bead roller assist tool, attach the rectangular tube in the kit to the "Bead Loosener Arm". Use the existing hole in the bead loosener arm. Position the tube at a slight angle and tighten.



Figure 15 - Attach tube for bead roller assist tool storage.



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16. Next, will be the installation of the Duckhead® mount/demount tool bracket. Start by removing the bolt in the bottom of the vertical bar. This bolt is very tight; use caution when loosening.

Figure 16 - Install mount/demount tool bracket.

17. Next install the bracket to the vertical slide using the hex bolt; discard the washer. Note that the metal Duckhead® mount/demount tool is shown; the plastic Duckhead mount/demount tool can be substituted for the metal mount/demount tool.



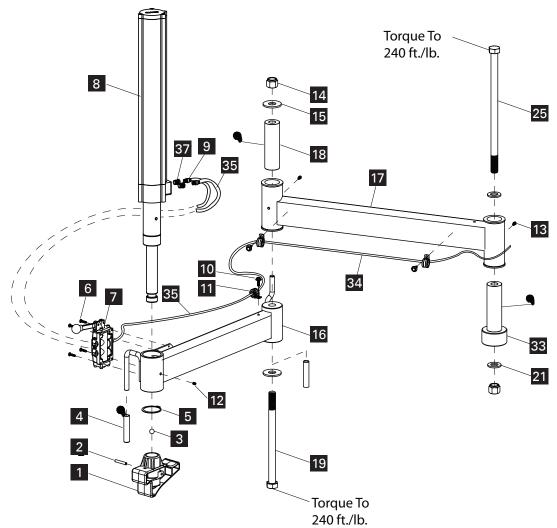
Figure 17 - Install bracket to the vertical slide.

18. Reconnect the air pressure source and check for leaks. Cycle the cylinder on the Robo-ArmTM several times to make sure cylinder operates correctly (valve up for cylinder up - valve down for cylinder down).

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Parts Identification

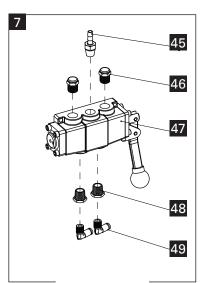
Kit 85009937 Robo-Arm™ Accessory



Apply Grease To These Locations

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	8183641	Plastic Hold Down Foot	17	8184904	Rear Arm Weldment
2	905563	Roll Pin, 1/4" Dia x 1-1/2"	18	8181038	Swing Arm Pivot Pin
3	8301017	Dia. Steel Ball, 1/2"	19	8183703	3/4-10 x 10-1/2" Hex HD Cap Srw
4	7000230	Rubber Hand Grip, 1/2"	21	8182457	Flat Washer, 3/4 SAE
5	8183637	2" Ext. Retaining Ring	25	8183635	Screw, 3/4-10 x 14, HHCS, Gr.5
6	8181983	10-24 x 3/4 Lg. BHSCS	33	8184208	Pivot Pin Spacer
7	* * *	Robo-Arm LR Valve Assembly	34	*	Hose, Rubber, 1/4, 58" Black
8	85608884	Cylinder Assembly 2.5" Diameter	35	*	Plastic Tube, 1/8 x 6"
9	8181996	1/4 NPT x 1/8 Tube St. Fitting		*	Plastic Tube, 1/8 x 16"
10	8106301	1/4-20 x 3/4" HWHST Screw	37	8109481	1/4 NPT x 1/8 NPT RDCR Fitting
11	8182044	Neoprene Cushion Clamp			_
12	8183649	1/4-20 x 5/16" Soc Hd Set Screw			
13	8184226	1/4-28 Grease Fitting	* Hos	se Reels	
14	8182016	3/4-10 Hex Nylock Lock Nut	LENGT	H PART NO.	DESCRIPTION
15	8100994	Flat Washer, 3/4"	50-ft.	85000375	1/4" ID x 1/2" OD Black Rubber Hose
16	8184905	Front Arm Weldment	50-ft.	85000376	1/8" OD x 0.25 Plastic Tube

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Robo-Arm Valve Assembly

ITEM	PART NO.	DESCRIPTION
45	8000378	Brass Straight Fitting, 1/4 NPT
46	8105615	Small Muffler
47	8185585	3 Position Valve
48	8109481	RDCR Fitting, 1/4 NPT x 1/8 NPT
49	8181997	Male Elbow, 1/8 NPT x 1/8"

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