

ABB Dress Out Kit Instruction Manual



WARNING

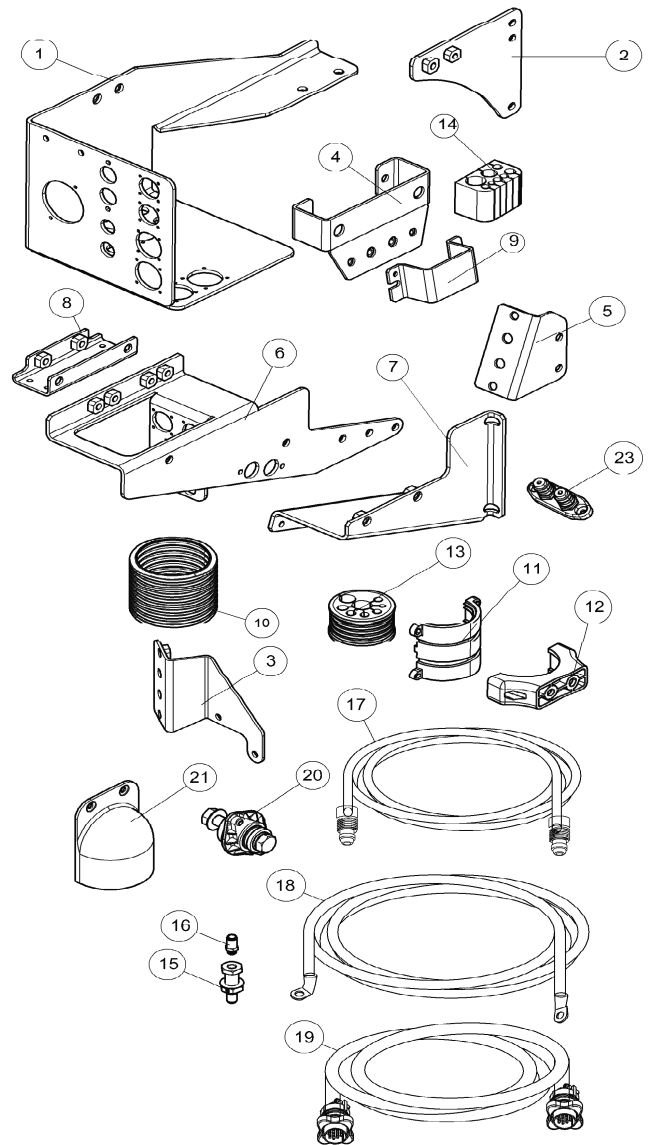
ELECTRIC SHOCK CAN KILL

Turn off power to arm and feeder before installing dress out kit. Verify that power is not available to wirefeeder.

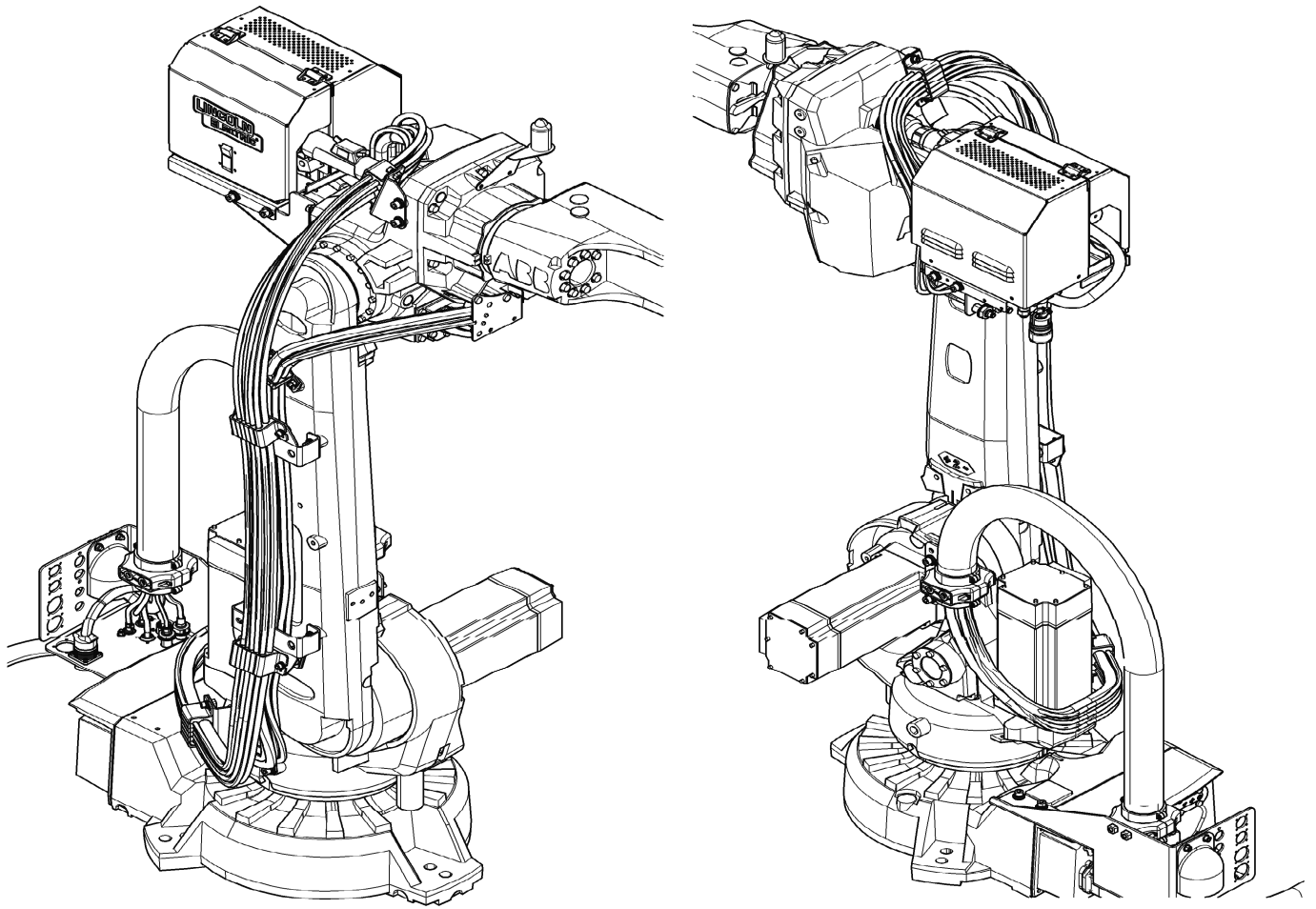
Only qualified personnel should install Dress Out Kit.

Select your arm: **K4253-IRB2600ID-B**

ITEM	Lincoln PN	DESCRIPTION	UNIT	QTY
1	M25433-8	Cable Management Bulkhead Bracket B	PC	1
2	M25433-9	CONDUIT CLAMP BRACKET	PC	1
3	M25433-10	CABLE CLAMP BRACKET 1	PC	1
4	M25433-11	CABLE CLAMP BRACKET 2	PC	2
5	M25433-12	CABLE CLAMP BRACKET 3	PC	1
6	M25433-13	WIREFEEDER BRACKET A-RH	PC	1
7	M25433-14	WIREFEEDER BRACKET A-LH	PC	1
8	M25433-15	WIREFEEDER HOLD BRACKET(for 4R220)	PC	1
9	M25455-1	Block, Cable Holder Bracket,Top	PC	4
10	M25431-22	52mm Conduit, PARAB Nylon	M	1.1
11	S30266-24	Insert, Conduit Clamp	PC	4
12	S30266-27	Clamp, 52mm Conduit	PC	4
13	S30266-25	Rubber Holder, Axis 1	PC	2
14	S30266-26	Block, Cable Holder	PL	4
15	S30266-8	GAS FITTING	PC	2
16	S30266-16	FEMALE CONNECTOR	PC	2
17	M25437-2	GAS HOSE , [4.4M]	PC	1
18	M25439-2	POWER CABLE WITH BEND,[4.7M]	PC	1
19	M25440-2	CONTROL CABLE [ArcLink 14 pin] , [4.3M]	PC	1
20	S16656-5	OUTPUT STUD	PC	1
21	M20007	OUTPUT STUD COVER	PC	2
22	S30267-2	HARDWARE KIT	PC	1
23	S31896	WATER CONNECTION KIT	PC	2
24	M25438-2	WATER HOSE-Red & Blue[4.3M]	PC	1
25	S30266-15	SPACER, CABLE BRACE	PC	2
26	S27052-2	LEAD GROMMET	PC	2
27	S27052-1	LEAD GROMMET	PC	2



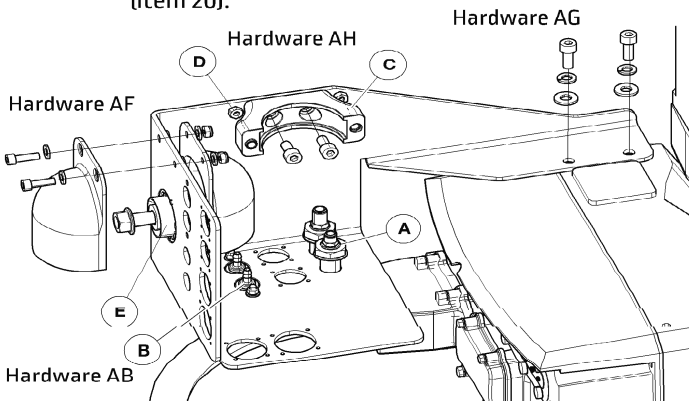
Installation Overview



Step 1

Assemble and install the base Cable Management Bulkhead Bracket B (item 1).

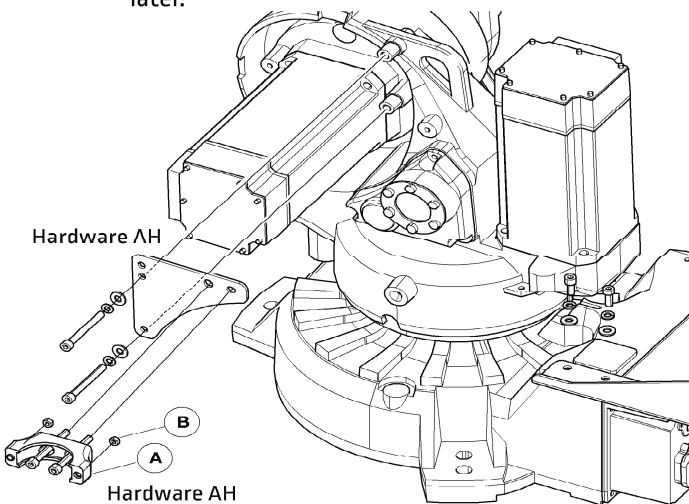
- Install the air and gas bulkheads (item 14), including the fittings (item 15).
- Install the water bulkhead (item 22). Note the direction of mounting.
- Install one Clamp, 52mm Conduit (item 11).
- Install two M6 nuts in the plastic conduit clamp to make it easier when finishing the clamp assembly later.
- Install the 3/0 lug (item 19) and the rubber boots (item 20).



Step 2

Assemble and install the axis 1 CONDUIT CLAMP BRACKET (item 2).

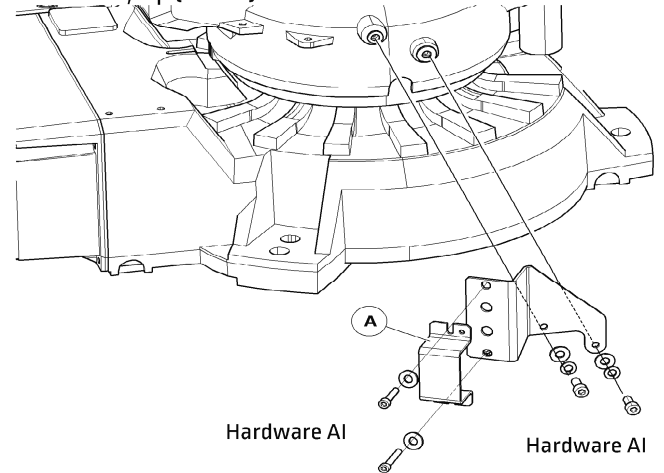
- Install one Clamp, 52mm Conduit (item 11).
- Install two M6 nuts in the plastic conduit clamp to make it easier when finishing the clamp assembly later.



Step 3

Assemble and install the axis 1 CABLE CLAMP BRACKET 1 (item 3)

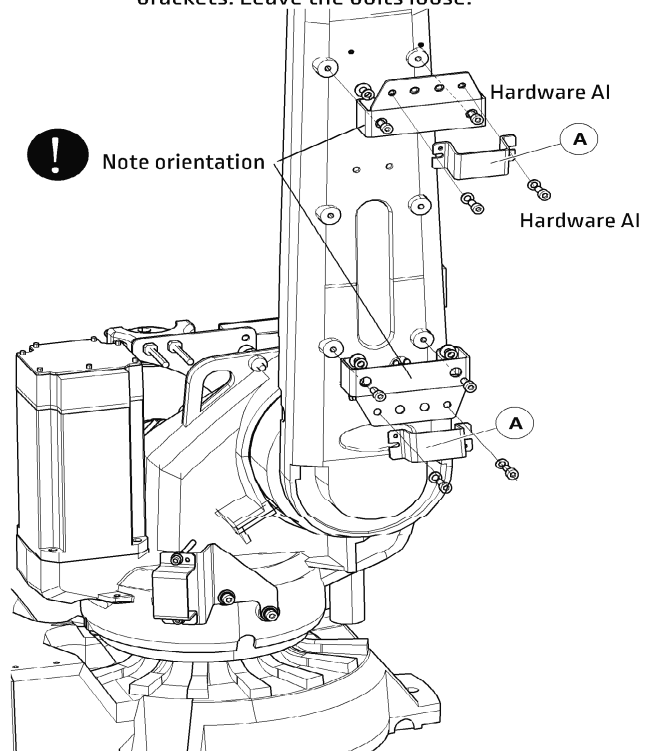
- Install the hardware for Block, Cable Holder Bracket, Top (item 8). Leave the bolts loose.



Step 4

Install both CABLE CLAMP BRACKET 2 (item 4)

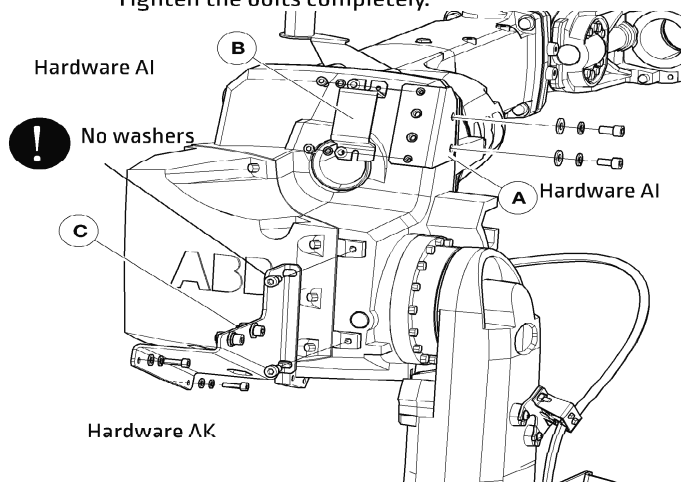
- Install the hardware for the rectangular clamp brackets. Leave the bolts loose.



Step 5

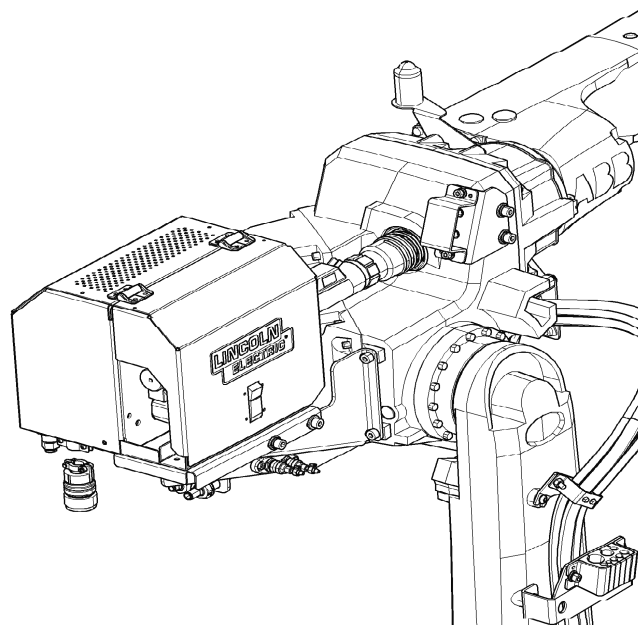
Install two of axis 3 brackets and WIRE FEEDER BRACKET (item 6).

- Install the strain relief bracket
- Install the hardware for the rectangular clamp bracket. Leave the bolts loose.
- Install the bracket shown in the image. Note that this is attached without lock washers and washers. Tighten the bolts completely.



Step 7

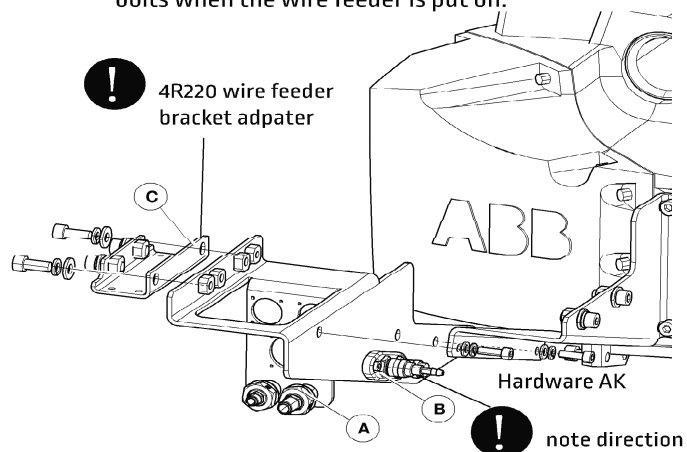
Install the Wire Feeder and Torch according to operator manual.



Step 6

Install the axis 3 BULK HEAD BRACKET A (item 7).

- Install the air & gas bulkheads, including the fittings.
- Install the water bulkhead. Note the direction of mounting.
- If you have a 4R220 wire feeder, install the 4R220 wire feeder bracket adapter. Tighten these bolts completely. You will have limited access to these bolts when the wire feeder is put on.

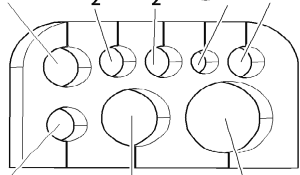


Step 8

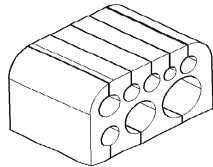
CABLE BUNDLE INSTALLATION ON THE ROBOT

1. Lay all the cables out on the floor or on a table. Gather all necessary components (rubber clamps, conduit, and cables). **DO NOT CONTINUE UNTIL YOU HAVE ALL CABLES.**
 - Make sure the cables are all going the same direction (e.g. all the wire feeder connections at one end and all the base bulkheads at the other).
2. Insert the cables into the rectangular rubber clamps where the tape markers are. Don't do the circular ones until the following steps.
 - Make sure to check the model to know what direction the rubber clamps are supposed to be facing. If they are backwards, the robot will not dress out correctly.
 - Start with the weld cable for the rectangular clamps.
 - For the top row in the rectangular clamps, start in the middle, with water or gas. Do the torch cable and air last.

torch h₂O h₂O gas air

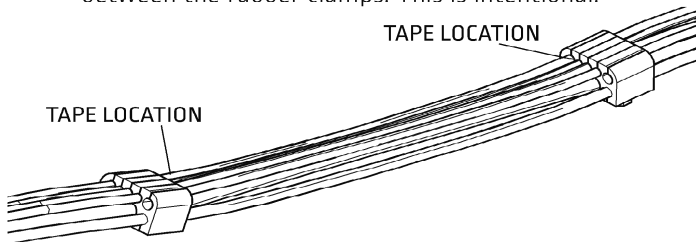


valve feeder 3/0



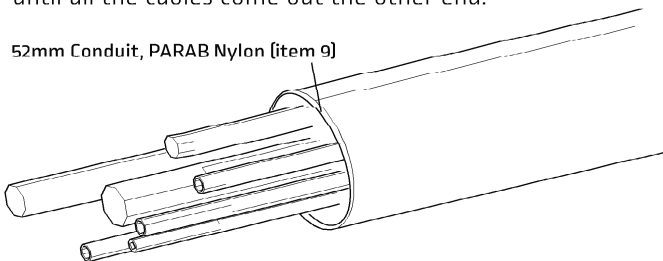
item 13

- It's okay that the cables aren't all the same length between the rubber clamps. This is intentional.

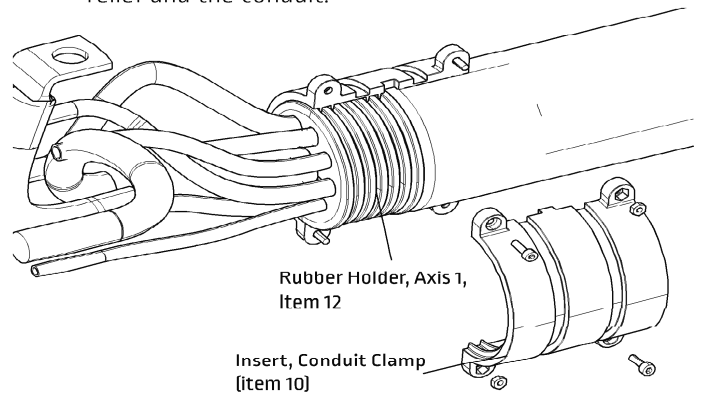


3. Slide the conduit over the cables on the conduit end. It helps to stagger the cables, push one a few inches through, then insert another one in, and keep doing that until all the cables come out the other end.

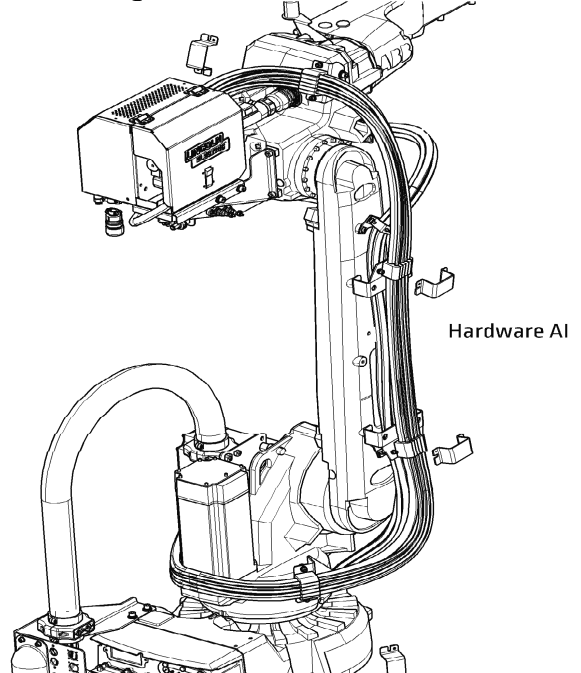
52mm Conduit, PARAB Nylon [item 9]



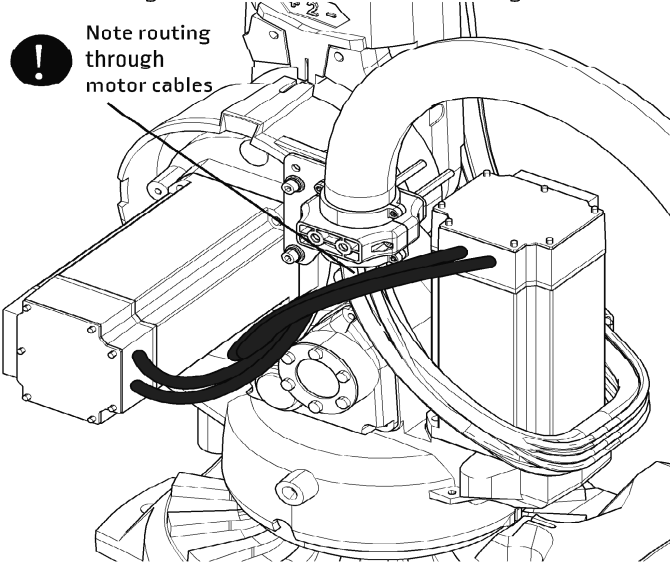
4. Put the two round conduit clamps on the cables. Push them as far towards the conduit as they will go.
 - Ensure that the rubber is facing the correct direction. Although this isn't as much of an issue with the round clamps, you will have an easier time dressing the robot out at the if the rubber clamps are facing the correct direction.
5. Use M3-0.5 x 10L and M3 nuts to secure the plastic clamps to the round rubber strain relief and the conduit on both ends.
 - The plastic clamps have a side for the M3 nut to fit into, make sure you put the M3 nut on the correct end or it will never tighten up.
 - The conduit and rubber strain relief should slide into the plastic clamp fairly easily, if it doesn't, make sure that the grooves are lined up with the rubber strain relief and the conduit.



6. Place the dress kit on the robot. Starting at the top, secure the first rectangular strain relief to the robot.



7. Working your way down the robot, keep putting the clamps on the robot securing the strain reliefs to the robot. When you get to axis 1, make sure you fish the conduit through the motor cables. See the image below.

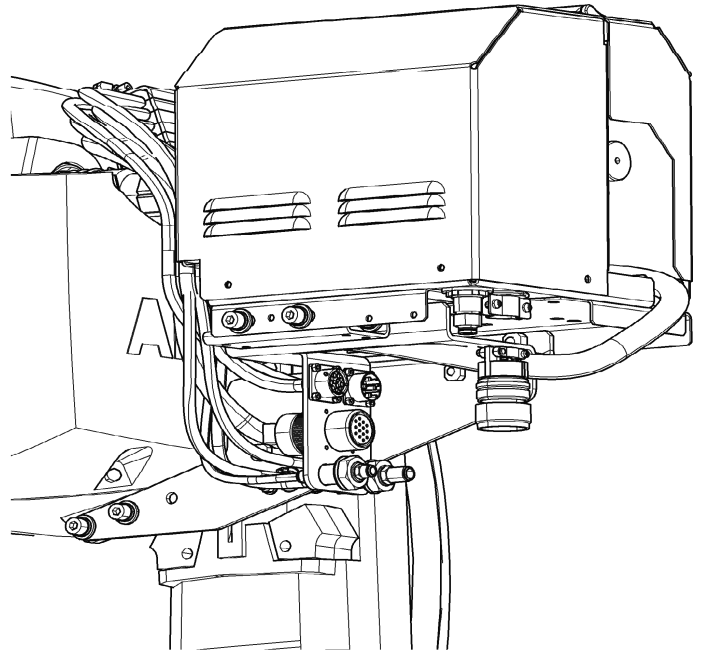


8. Before attaching the last round clamp, terminate any cables that might be hard to reach. Having the conduit out of the way can make this easier.

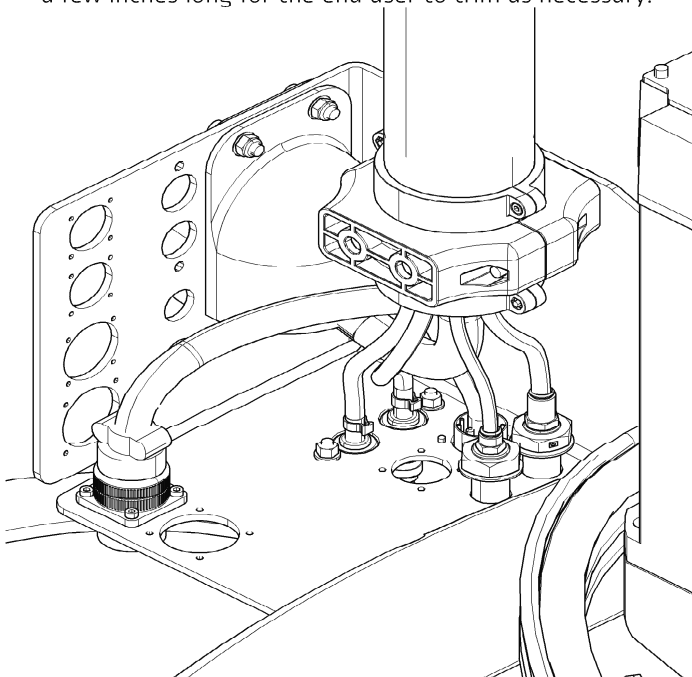
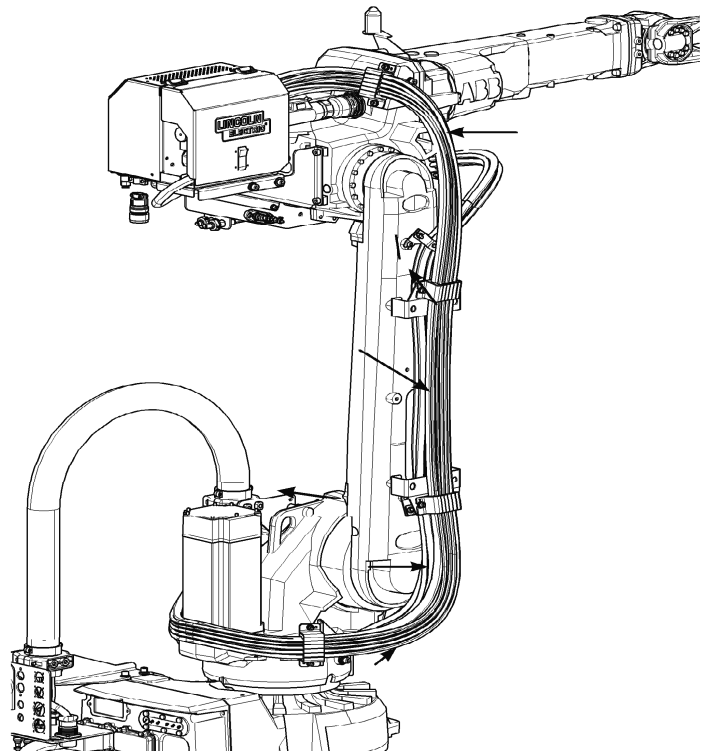
9. Terminate all tubes, hoses, and cables at the base bulkhead and at the axis 3 bulkhead.

a. Trim air/gas tubes accordingly. These are intentionally left a few inches long for the end user to trim as necessary.

10. Using a crimping tool, crimp the water fitting on the water hose if it doesn't come already installed.



11. Install cable ties between each clamp section (excluding the conduit section).



Step 9

Tighten all hardware on robot. Check movement of arm is not constricted.

K4253-IRB2600ID-B

S30267-2 Hardware Kit Contents

ITEM	PACKAGING	PART NUMBER	DESCRIPTION	QTY
1	Hardware AG (Bracket B to Robot base)	S26641-45	M8×20 bolt	2
		S26639-15	M8 spring washer	2
		S26638-15	M8 flat washer	2
2	Hardware AB (control cables and water hose for A&B Bracket)	S26641-68	M3x10 screws	8
		S26641-61	M5×16 screw	4
		S26640-12	M5 nut	4
		S26638-14	M5 flat washer	8
		S26639-17	M5 spring washer	4
		S30266-4	Water hose clamp	4
3	Hardware AH (corrugated pipe to bracket)	S26641-72	M8×35 bolt	2
		S26639-15	M8 spring washer	2
		S26638-15	M8 flat washer	2
		S26641-58	M8x15 bolt	4
		S26641-71	M6×45 bolt	4
		S26640-15	M6 nut	4
		S26641-68	M3x10 screws	8
		S26640-1	M3 nut	8
4	Hardware AI (Clamp bracket to Robot base)	S26641-65	M6x16 bolt	10
		S26639-16	M6 spring washer	10
		S26638-16	M6 flat washer	10
		S26641-45	M8×20 bolt	8
		S26639-15	M8 spring washer	8
		S26638-15	M8 flat washer	8
5	Hardware AJ (feeder brackets to arm)	S26641-58	M8x15 bolt	2
		S26641-45	M8x20 bolt	3
		S26641-63	M8×25 bolt	2
		S26641-64	M6×20 bolt	2
		S26639-15	M8 spring washer	5
		S26638-15	M8 flat washer	5
		S26639-16	M6 spring washer	2
		S26638-16	M6 flat washer	2
		S26641-45	M8x20 bolt(for 4R220)	3
		S26639-15	M8 spring washer(for 4R220)	3
S26638-15	M8 flat washer(for 4R220)	3		
6	Hardware AF (output stud and cover)	S26641-60	M4x25 bolt	2
		S26638-13	M4 flat washer	2
		S26641-64	M6x20 bolt	2
		S30268-3	M6 Nylon lock nut	2
		S26638-16	M6 flat washer	4
		S30268-1	1/2 Bolt	1
		S30270-1	1/2 flat washer	2
S30269-1	1/2 Nut	1		
7	Hardware J	S30266-3	Black Zip Tie	10