

# ABB Dress Out Kit Instruction Manual



## WARNING

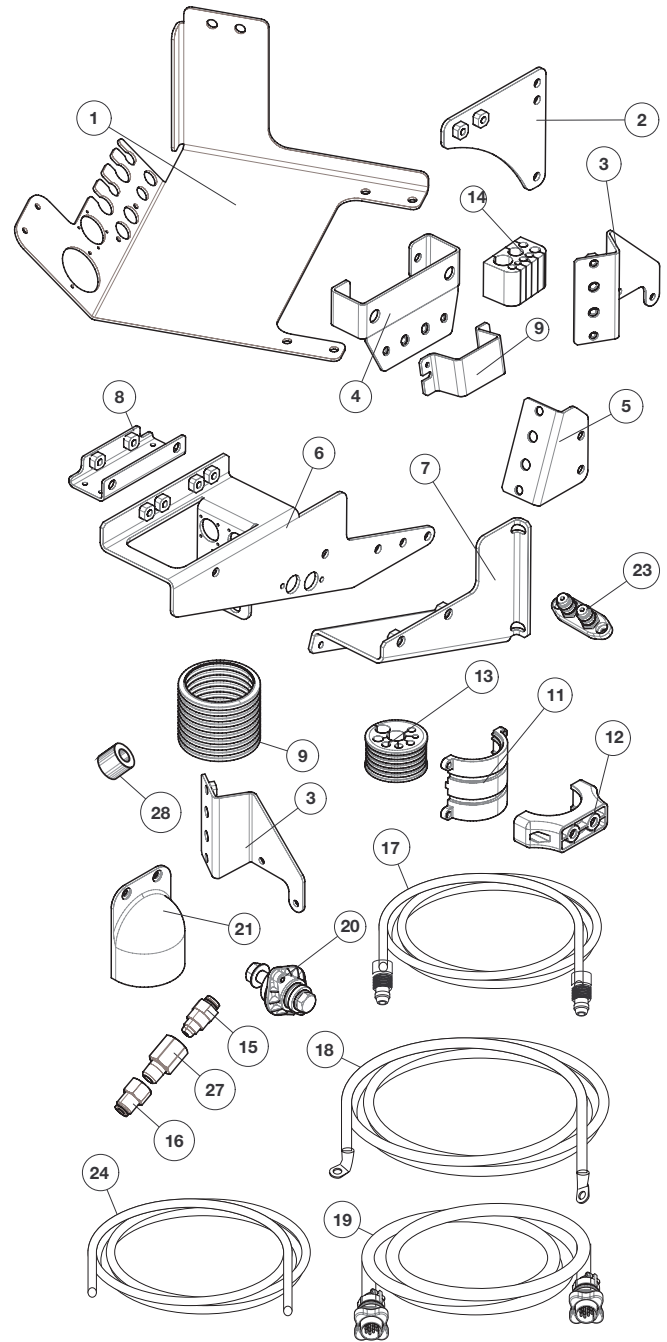


Turn off power to arm and feeder before installing dress out kit. Verify that power is not available to wirefeeder.  
Only qualified personnel should install Dress Out Kit.

Select your arm:

**K4253-IRB2600ID-B**

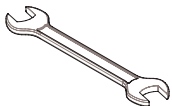
ITEM	Lincoln PN	DESCRIPTION	UNIT	QTY
1	M25433-8	Cable Management Bulkhead Bracket B	PC	1
2	M25433-9	CONDUIT CLAMP BRACKET	PC	1
3	M25433-10	CABLE CLAMP BRACKET 1	PC	1
4	M25433-11	CABLE CLAMP BRACKET 2	PC	2
5	M25433-12	CABLE CLAMP BRACKET 3	PC	1
6	M25433-13	WIREFEEDER BRACKET A-RH	PC	1
7	M25433-14	WIREFEEDER 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	Conduit Clamp Insert	PC	4
12	S30266-27	Conduit Clamp Housing	PC	4
13	S30266-25	Rubber Holder, Axis 1	PC	2
14	S30266-26	Block, Cable Holder	PC	4
15	S22325-140	GAS FITTING	PC	2
16	S30268-6	FEMALE CONNECTOR	PC	1
17	M25437-2	GAS HOSE , [4.3M]	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 STUDS	PC	1
21	M20007	OUTPUT STUDS 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	1
27	S30266-8	GAS FITTING ADAPTER	PC	1
28	S30266-15	SPACER CABLE BRACKET	PC	2
		INSTRUCTION MENU	PC	1



## Required Tools:



M2.5, M3, M5 and M6  
Allen Wrenches



M8, M10 & [2] M17 Wrenches

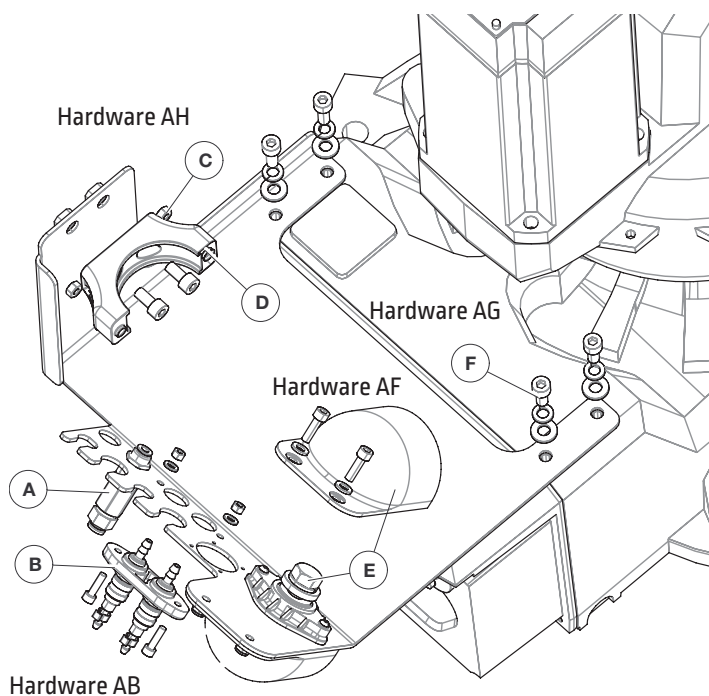
# K4253-IRB2600ID-B

S30267-2 Hardware Kit Contents			
DESCRIPTION	PART NUMBER	Description	QTY
Hardware AG (Bracket B to Robot base)	S26641-45	M8×20 bolt	4
	S26639-15	M8 spring washer	4
	S26638-15	M8 flat washer	4
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
	S26638-13	M5 flat washer	8
	S30266-4	Water hose clamp	4
Hardware AH (cor- rugated pipe to bracket)	S26641-72	M8×35 bolt	2
	S26639-15	M8 spring washer	6
	S26638-15	M8 flat washer	6
	S26641-58	M8x15 bolt	4
	S26641-70	M5×36 bolt	4
	S26640-12	M5 nut	4
	S26641-68	M3x10 screws	8
	S26640-1	M3 nut	8
Hardware AI (Clamp bracket to Robot base )	S26641-65	M6x16 bolt	8
	S26639-16	M6 spring washer	8
	S26638-16	M6 flat washer	8
	S26641-45	M8×20 bolt	8
	S26639-15	M8 spring washer	8
	S26638-15	M8 flat washer	8
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
Hardware AF (output stud and cover)	S26641-60	M4x16 bolt	2
	S26638-13	M4 flat washer	2
	S26641-64	M6x20 bolt	2
	S26640-8	M6 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
Hardware J	S30266-3	Black Zip Tie	10

## Step 1

Assemble and install the base Cable Management Bulkhead Bracket B [item 1].

- Install the the female connector [Item 16]. See last page for customer connection requirements.
- Install the water connection kit [item 23] using hardware AB. Note the direction of mounting.
- Press in two M6 nuts from hardware AH in the conduit clamp housing [item 12] to make it easier when finishing the clamp assembly later.
- Install one part of the conduit clamp housing [Item 12] using the shorter M8 bolts in hardware AH.
- Using hardware AF, install the output stud [Item 20] with the M4 bolts, and the output stud cover, [Item 21] with the M6 bolts, washers and nut.
- install the assembled Cable Management Bulkhead Bracket [item 1] on the robot using hardware AG.

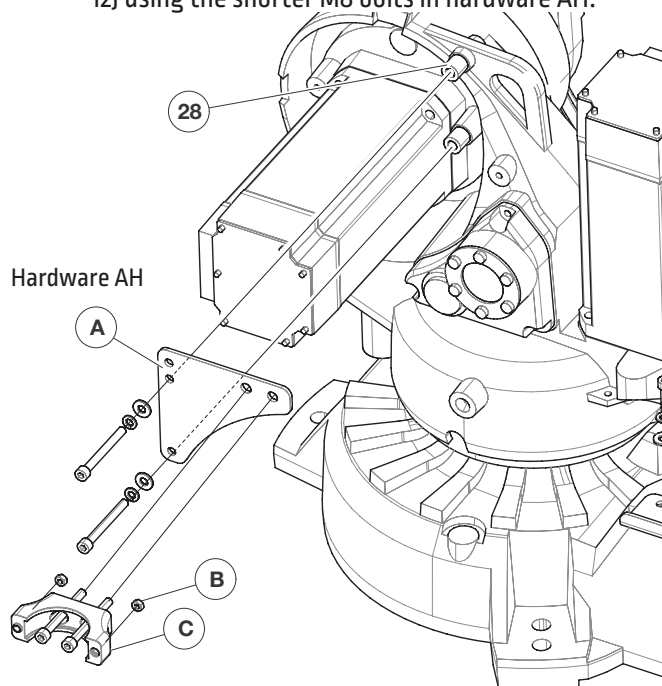


Hardware AH

## Step 2

Assemble and install the axis 1 CONDUIT CLAMP BRACKET [item 2].

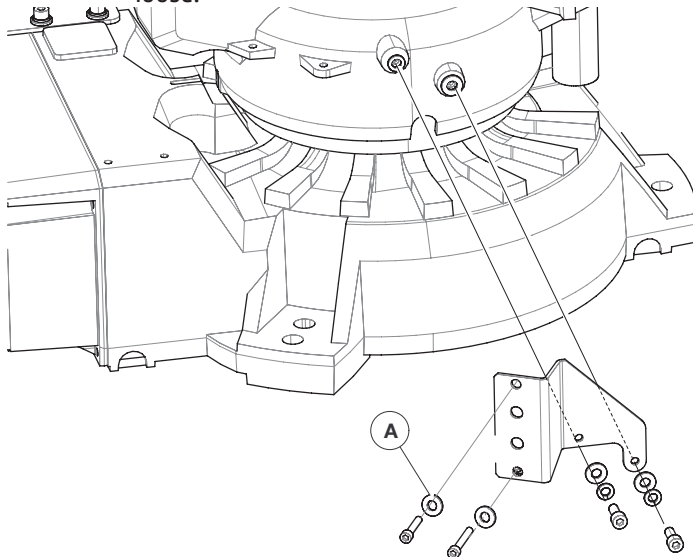
- Install the axis 1 Conduit Clamp Bracket and the Spacer Cable Bracket [Item 28] using the longer M8 bolts from hardware AH.
- Press in two M6 nuts from hardware AH in the Conduit Clamp Housing [Item 12] to make it easier when finishing the clamp assembly later.
- Install one part of the Conduit Clamp Housing [Item 12] using the shorter M8 bolts in hardware AH.



## Step 3

Assemble and install the axis 1 CABLE CLAMP BRACKET 1 [Item 3]

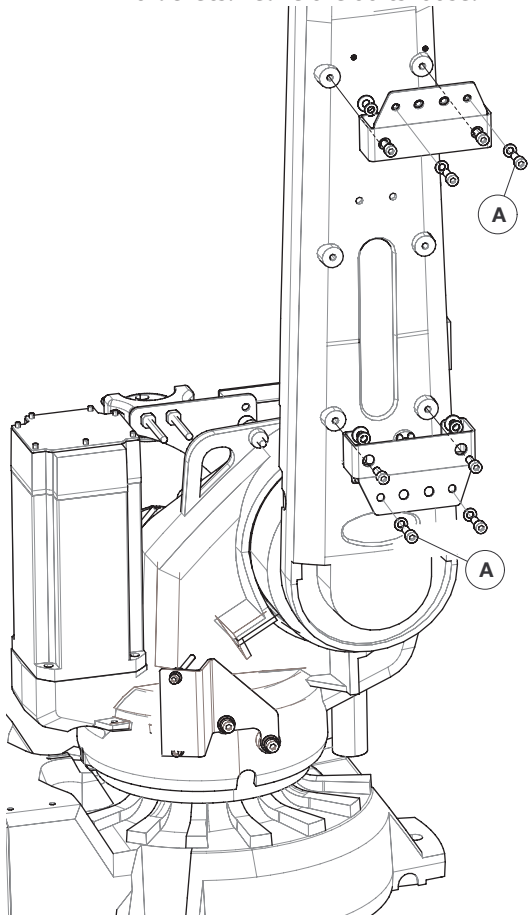
- Install the hardware for Block, Cable Holder Bracket, Top [item 8] using hardware AI. Leave the bolts loose.



## Step 4

Install both CABLE CLAMP BRACKET 2 (item 4)

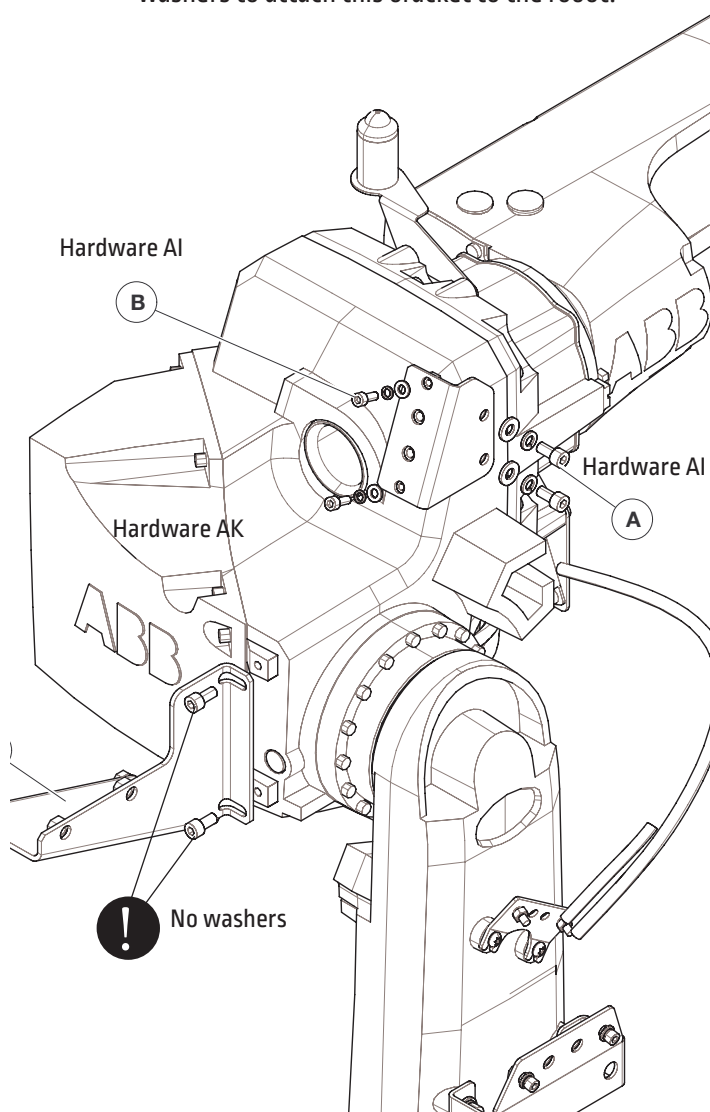
- Install the hardware for the rectangular clamp brackets. Leave the bolts loose.



## Step 5

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

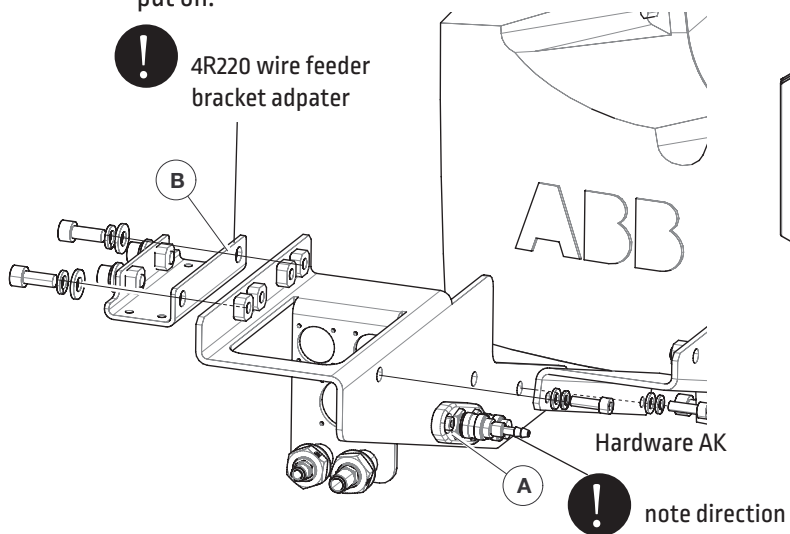
- Install the Cable Clamp Bracket 3 (Item 5) using hardware AI.
- Install the hardware for the Block, cable Holder Bracket (Item 9), hardware AI. Leave the bolts loose.
- Install the Wirefeeder Bracket A-LH (Item 7) with hardware AJ. Note there are no lock washers or washers to attach this bracket to the robot.



## Step 6

Install the axis 3 BULK HEAD BRACKET A [item 7].

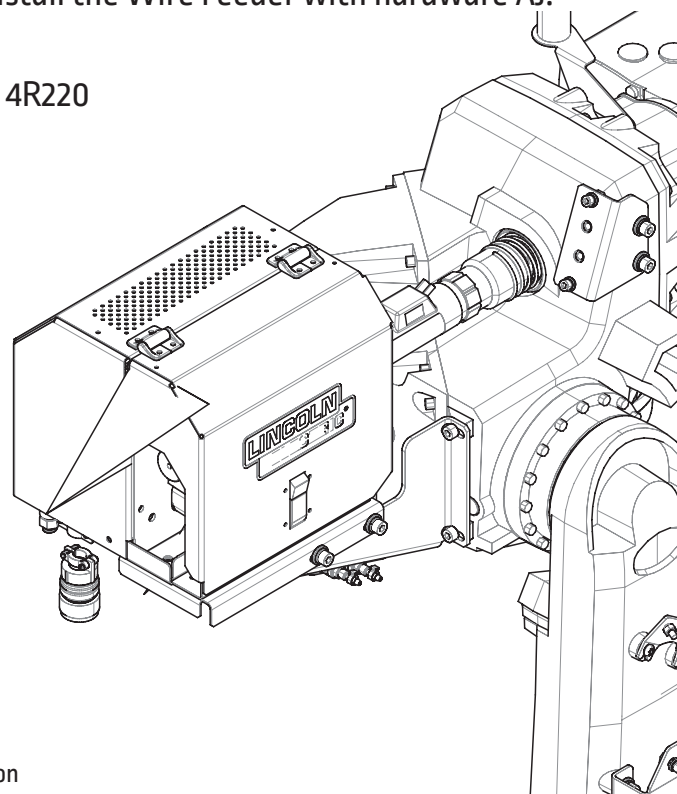
- Install the Water Connection Kit [Item 23] with hardware AB. Note the direction of mounting.
- If you have a 4R220 wire feeder, install the wirefeeder hold bracket [for 4R220][Item 8] using hardware AJ. Tighten these bolts completely. You will have limited access to these bolts when the wire feeder is put on.



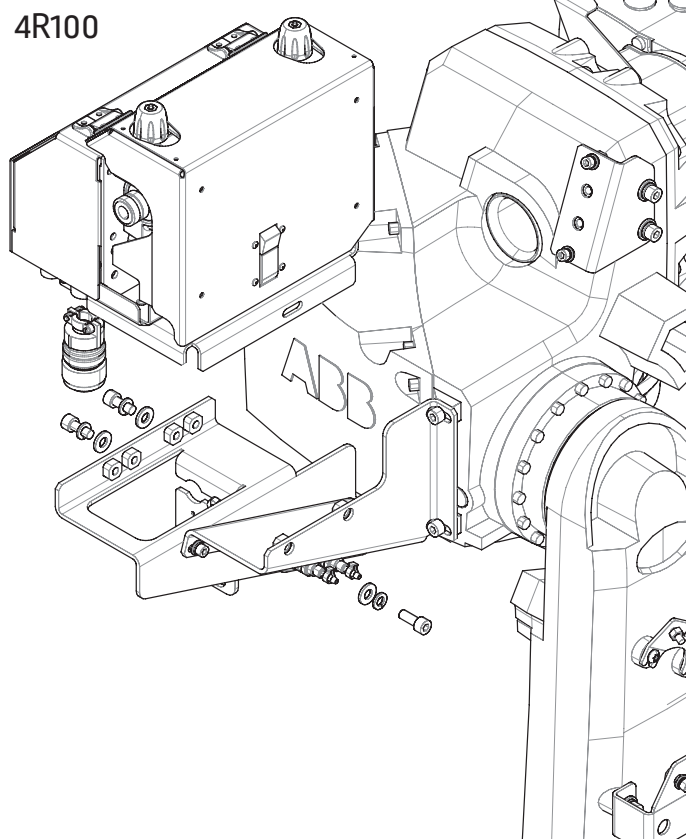
## Step 7

Install the Wire Feeder with hardware AJ.

4R220



4R100





# Step 8

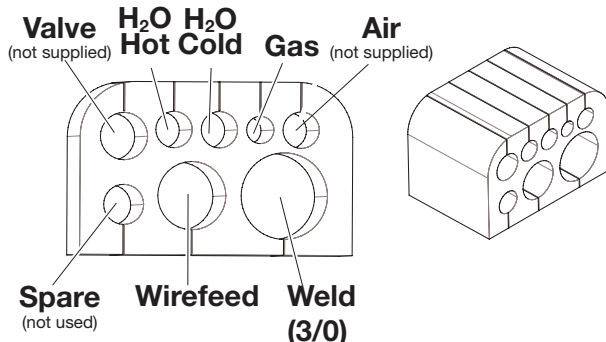
## CABLE BUNDLE INSTALLATION ON THE ROBOT

1. Lay all the cables out on the floor or on a table. Gather the following components:

- Item 17, 18, 19 and 24 (all cables and hoses)
- Item 13 (Rubber Holder Axis 1)
- Item 14 (Block, Cable Holder)
- Item 10 (52mm Conduit, PARAB Nylon)
- Item 11 (Conduit Clamp Insert)
- Hardware AH
- Optional customer supplied cables and hoses. Cables and hoses should be 1mm of the nominal size listed below:
  - 8mm OD air line
  - Valve cable for valve pack mounted at axis 3 (not supplied), 10.4mm DIA
- 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).

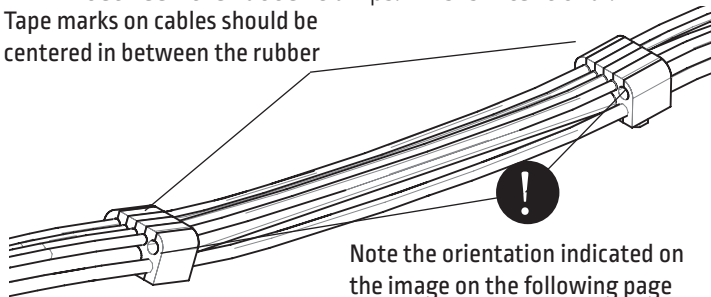
2. Insert the cables into the Block, Cable Holder (Item 14) where the tape markers are. The tape on the cables and hoses should be centered in the middle of the rubber clamps. Check the graphic on page 6 for the orientation of the block, cable holder (Item 14).

- 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.

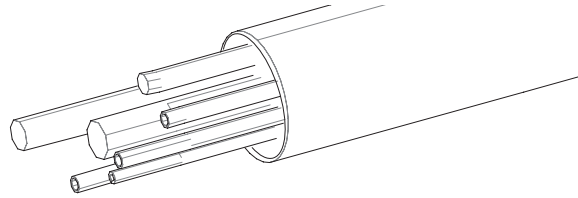


- It's okay that the cables aren't all the same length between the rubber clamps. This is intentional.

Tape marks on cables should be centered in between the rubber

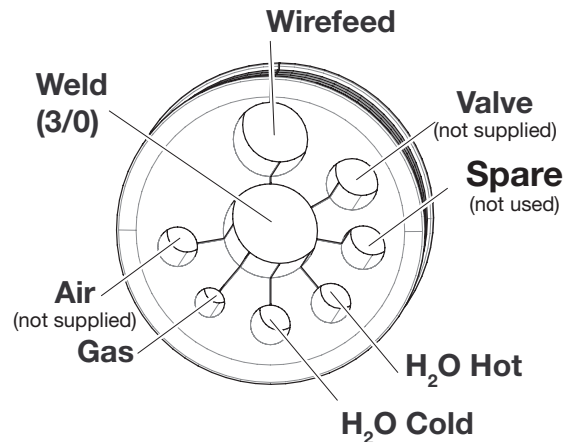


3. Slide the conduit over the cables on the base bulkhead end. It helps to stagger the cables, push one a few inches through, then insert another one in, and keep doing that until all the cables come out the other end.



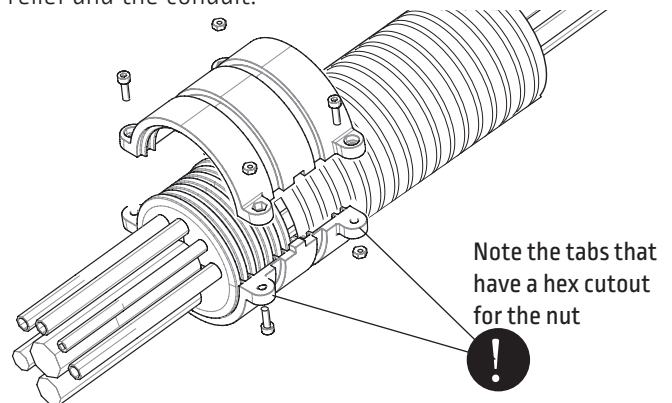
4. Put the two Rubber Holder, Axis 1 clamps (Item 13) on the cables. Push them as far towards the conduit as they will go.

- Ensure that the rubber is facing the correct direction. There is a natural way that the cables flow from the rectangular orientation to the round orientation.



5. Use M3-0.5 x 10L and M3 nuts to secure the Conduit Clamp Insert (Item 11) to the Rubber Holder, Axis 1 (Item 13) and the 52mm Conduit, PARAB Nylon (Item 10) on both ends.

- The Conduit Clamp Inserts (Item 11) 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.

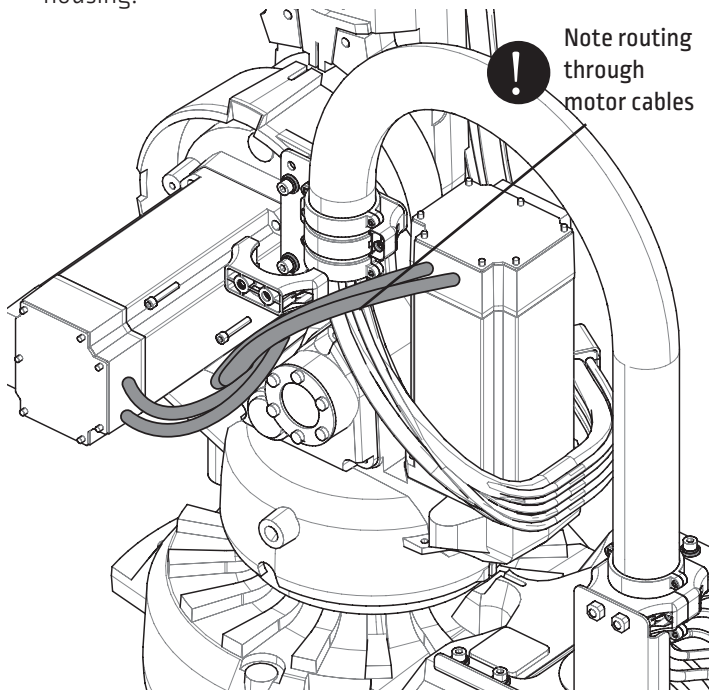


6. Place the dress kit on the robot. Starting at the top, secure the first Block, Cable Holder (Item 12) to the robot. Work your way down the robot arm until you reach the base bulkhead.

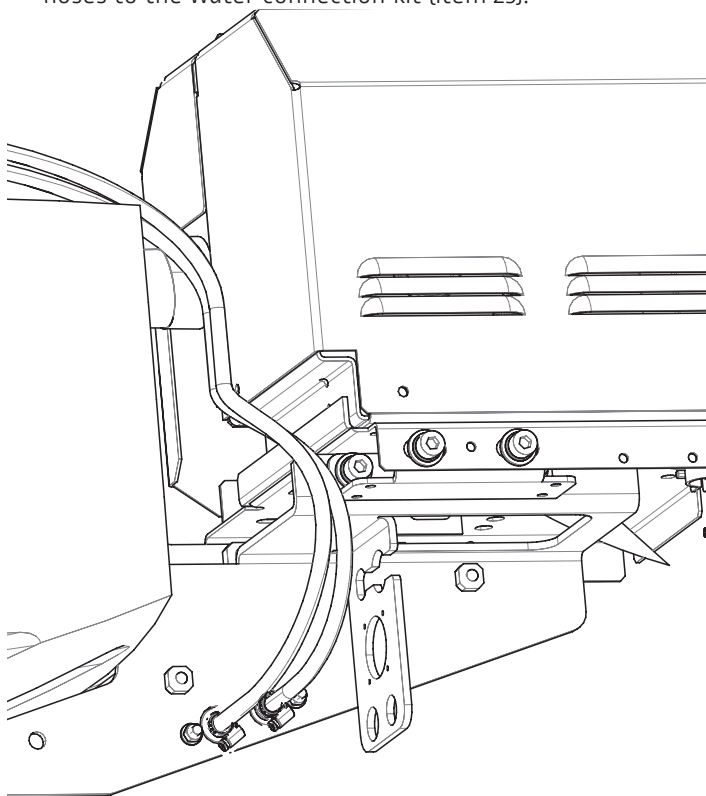
# Step 9

## INSTALL DRESS OUT KIT ON THE ROBOT

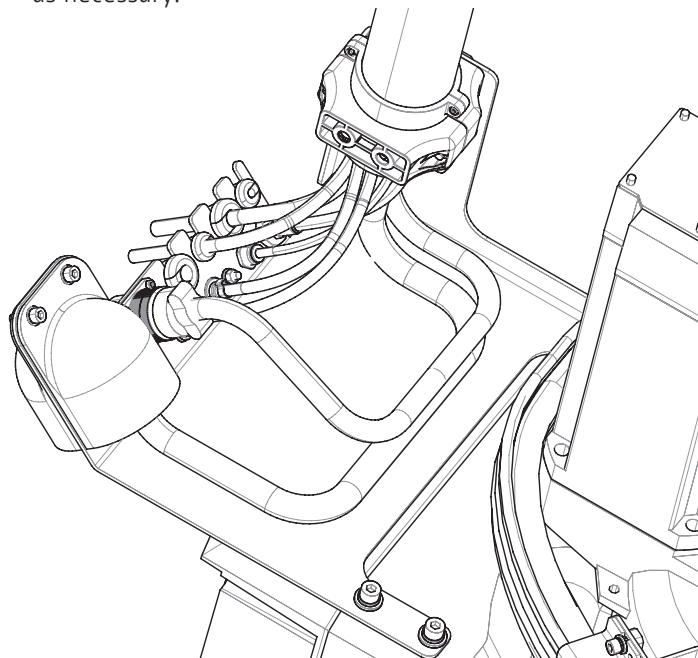
1. Working your way down the robot, keep putting the clamps on the robot securing the strain reliefs to the robot. When you get to axis 1, make sure you fish the conduit through the motor cables. See the image below. Use hardware AH to attach the conduit to the conduit clamp housing.



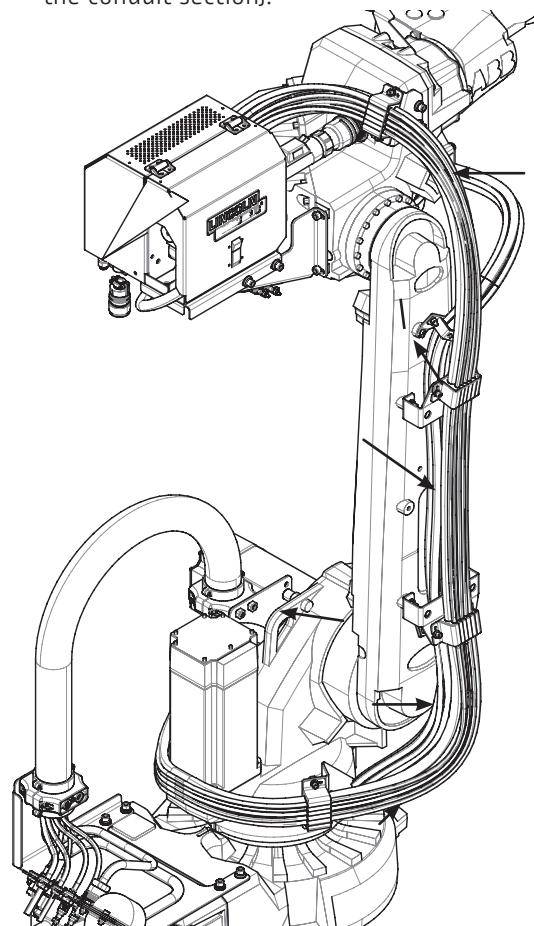
- b. Using the hose clamps in hardware AB, secure the water hoses to the water connection kit (Item 23).



2. 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.
3. Terminate all tubes, hoses, and cables at the base bulkhead and at the axis 3 bulkhead.
  - a. Trim the gas and water hoses tubes accordingly. These are intentionally left a few inches long for the end user to trim as necessary.

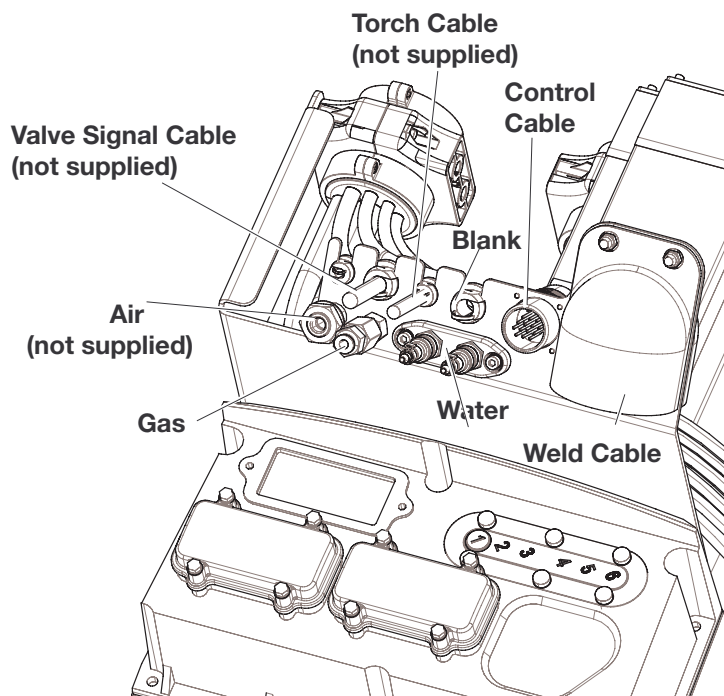
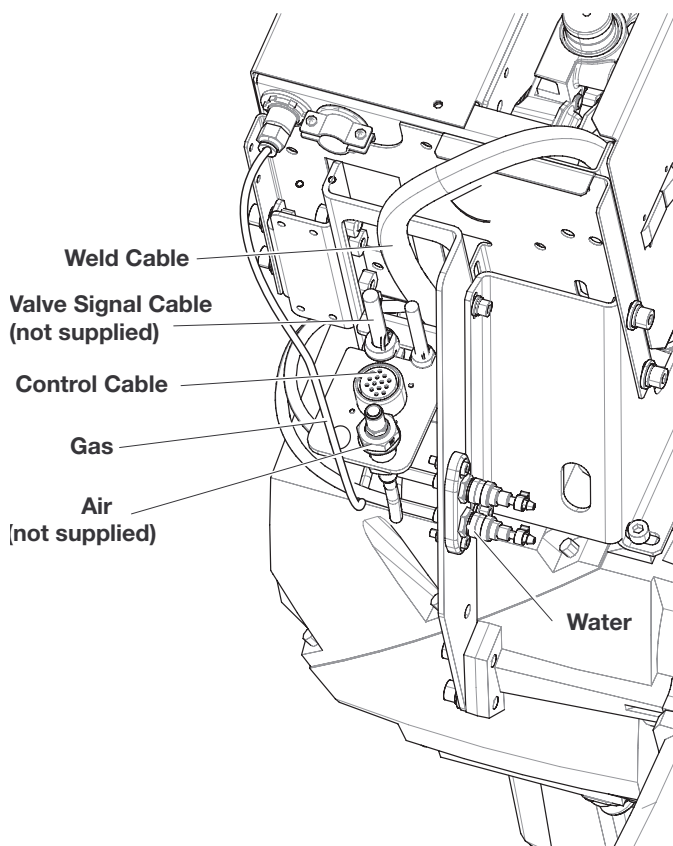


4. Install cable ties between each clamp section (excluding the conduit section).



# Step 10

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



## Base Bulkhead Gas Plumbing Options

### Customer Connection End

