

Ratchet Mechanism to Turn the Diaphragm—Components and Adjustment

1. Component Identification

Figure 1: Thrust Arm Assembly

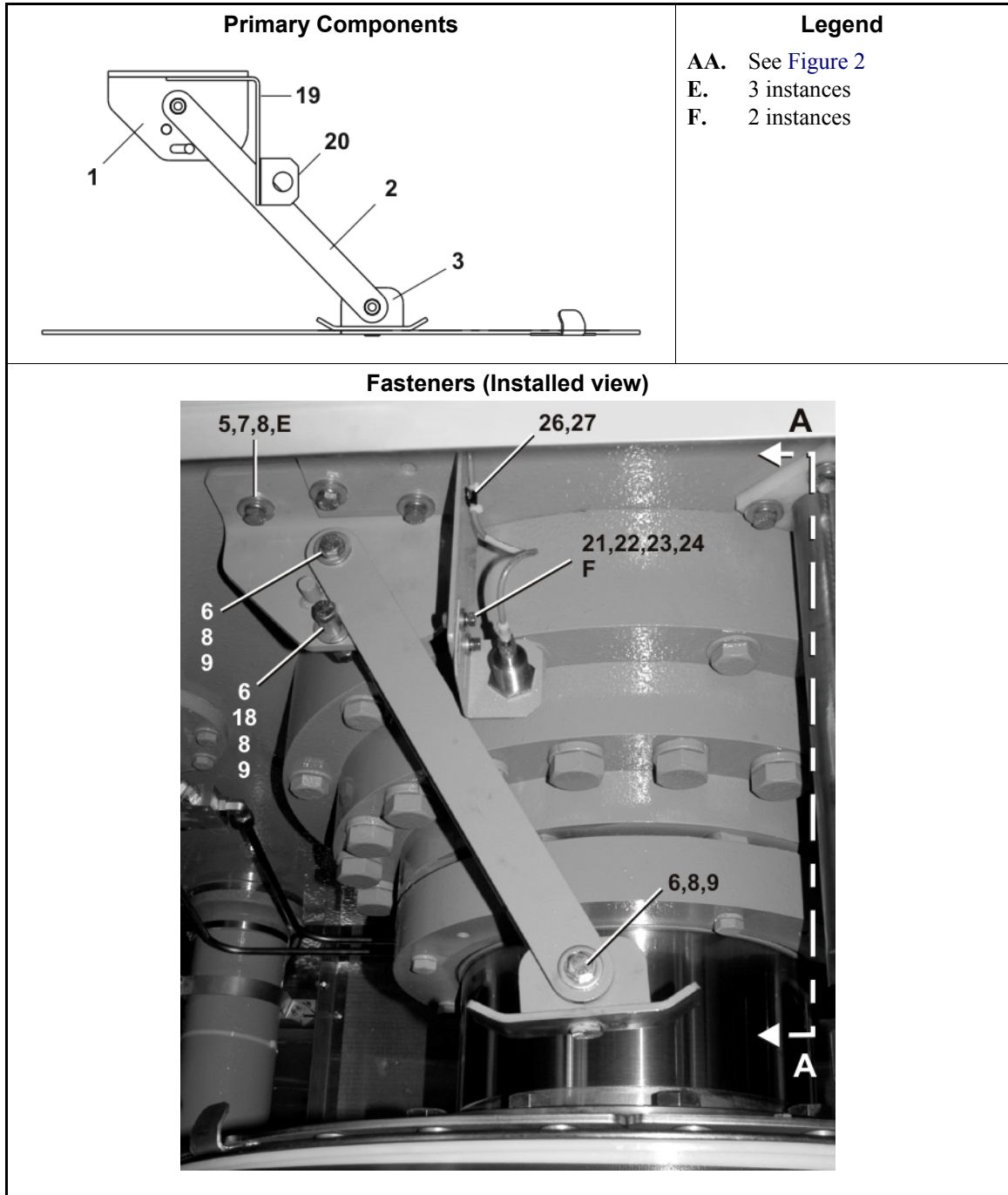


Figure 2: Thrust Arm Assembly—Detailed views

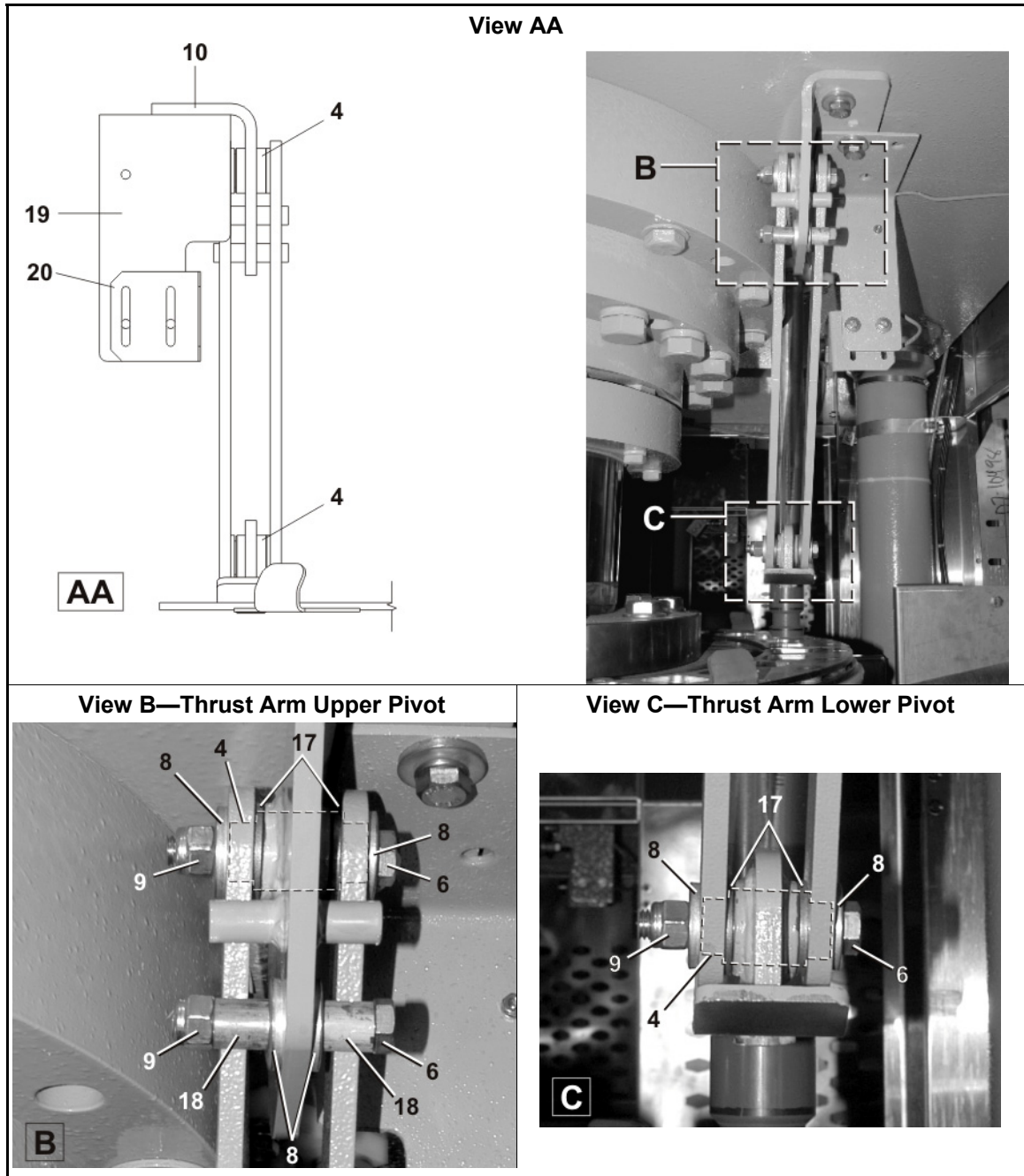


Figure 3: Ratchet Plate

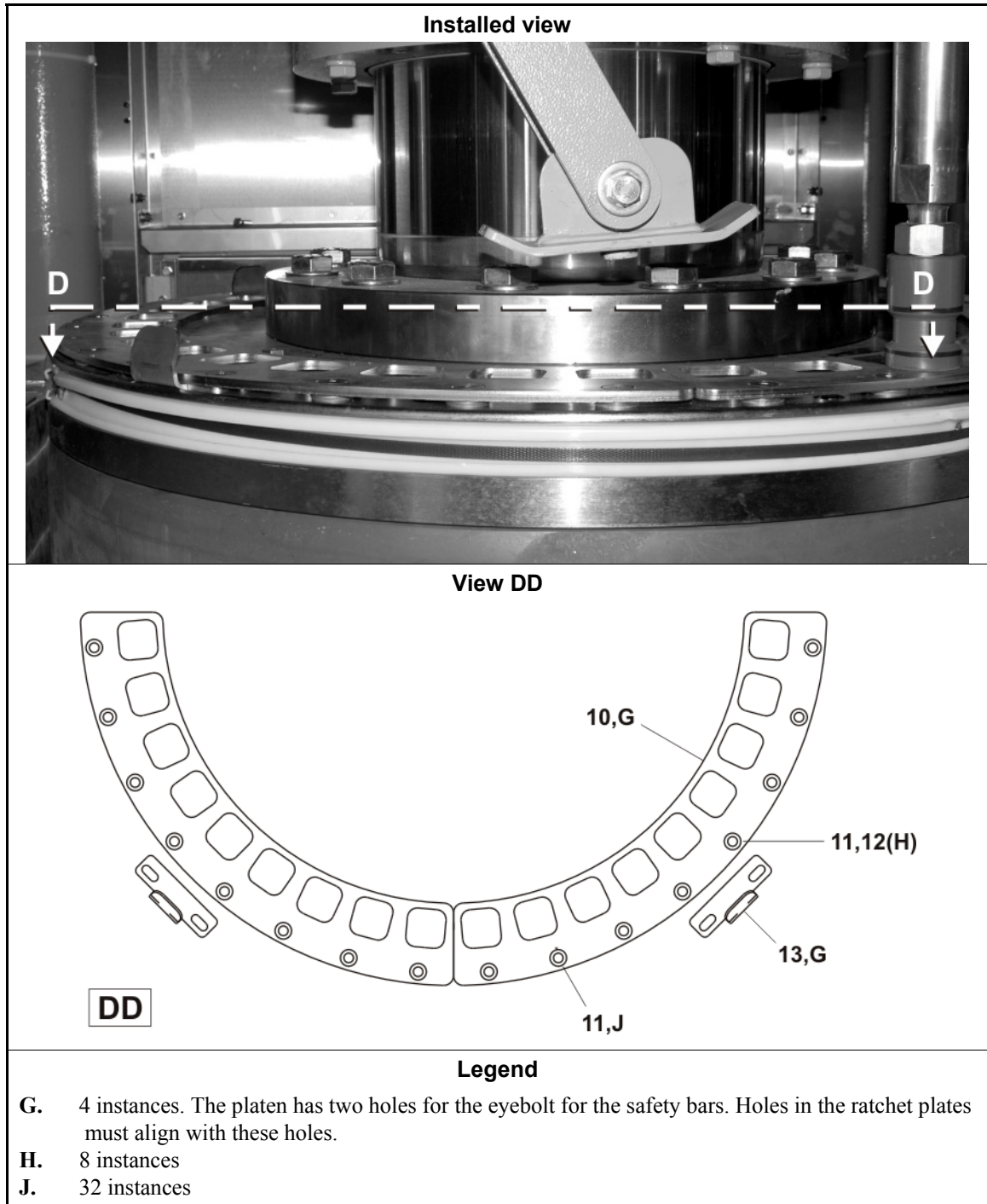


Figure 4: Switch Operation Rod

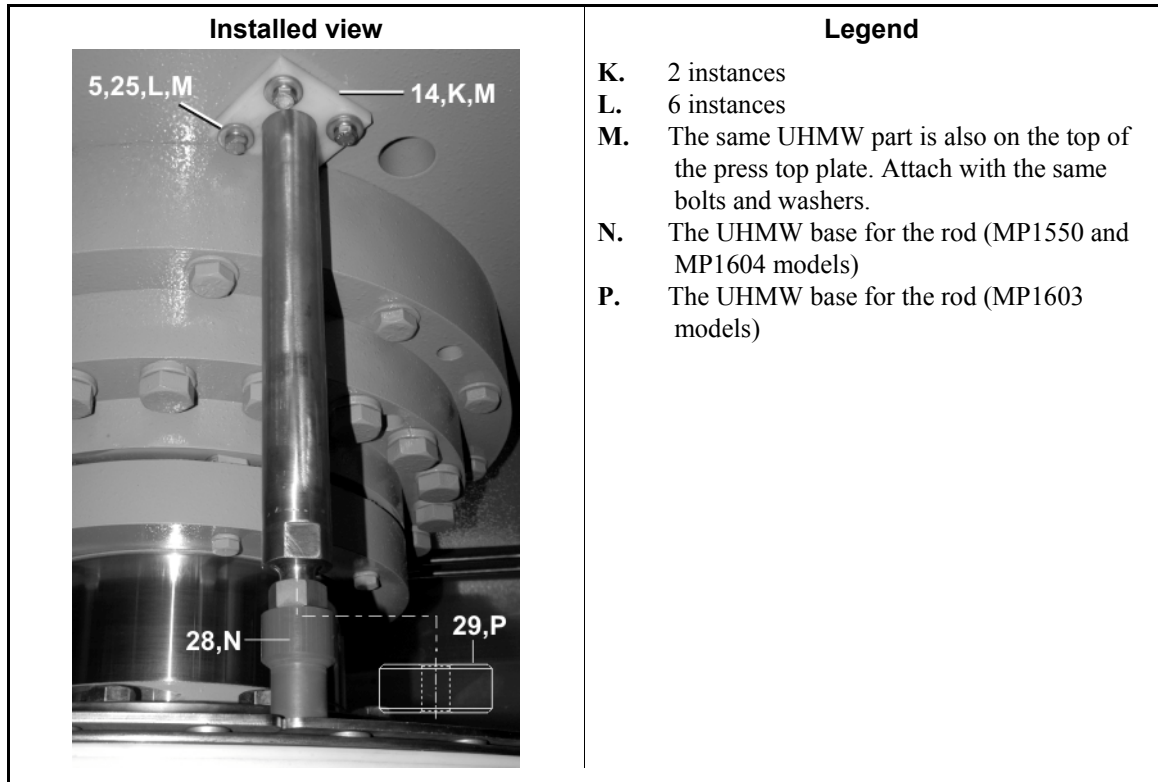


Table 1: Parts List—Ratchet Mechanism to Turn the Diaphragm

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	Item	Part Number	Description/Nomenclature	Comments
Assemblies				
	A	ACW10052	DIAPHRGM ROTATE DEVICE-MP1550	
	B	ACW10051	DIAPHRGM ROTATE DEVICE-MP1603	
	C	ACW10050	DIAPHRGM ROTATE DEVICE-MP1604	
Components				
A	1	W7 10572A	THRUSTARM PIVOT WLMT-MP1550 (COLOR=WARM GRAY)	
B,C	1	W7 10572	THRUSTARM PIVOT BRKT WLMT (COLOR=WARM GRAY)	
A,B	2	07 10573A	DAIPHRAGM THRUST ARM 16IN	
C	2	07 10573	DAIPHRAM THRUST ARM 18IN	
all	3	W7 10574	DIAPHRAGM DRIVE PIN WLMT	
all	4	X7 10578	TRUSTARM PIVOT SHAFT	
all	5	15K153	HXCAPSCR 1/2 -13 X 1 +1/4 SS	
all	6	15K196	HEXCAPSCR 1/2-13UNC2X3 18-8SS	
all	7	15U310	LOKWASHER REGULAR 1/2 SS18-8	
all	8	15U310S	FLATWASH-SS .53 X 1.37 .187T	
all	9	15G234NS	HXLOCKNUT NYL 1/2-13UNC2 SS18-	
A	10	07 10571A	DIAPHRAGM ROTATING PL-MP1550	
B,C	10	07 10571	DIAPHRAGM ROTATING PLATE	
all	11	15N230	FLTHDSOKSCR 3/8-16UNC 4"LG SS	
all	12	15U245	FLTWASH 3/8 STD COMM 18-8 SS	
all	13	07 10580	CAN TO PLATEN GUARD	
all	14	07 10581	DIAPHRAGM ROD LOWER GUIDE	
all	16	27B34010SS	SPACERROLL .51ID.625L.062T SS	
all	17	54E048	THRUSTBRG 1X1.5X1/8 BG#TB1624	
all	18	07 10582	SPACER 3/4"OD X.095 WALL X.75L	
all	19	07 10586	RAM UP PROX.SW BRKT	
all	20	07 10337	RECEIVING CHUTE SW MTG BRKT (COLOR=WARM GRAY)	
all	21	15N186	HXCAPSCR 1/4-20X3/4 SS18-8	
all	22	15G170	HEXNUT 1/4-20UNC2 SS18-8	
all	23	15U188	FLTWASH 1/4 STD COMM SS18-8	
all	24	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	25	15U285	FLATWASHER 1/2 STD COMM SS18-8	
all	26	15P010	TRDCUT PHILPANHDSCR 10-24X1/2S	
all	27	12P014GG	CAB.CLP.NON-METAL 3/8ID,3/8W	
A,C	28	X7 10250	GUIDE ROD UHMW BASE	
B	29	X7 10250A	DIAPHRAGM ROD UHMW BASE-MP1603	

2. The Stop Adjustment for the Ratchet Mechanism



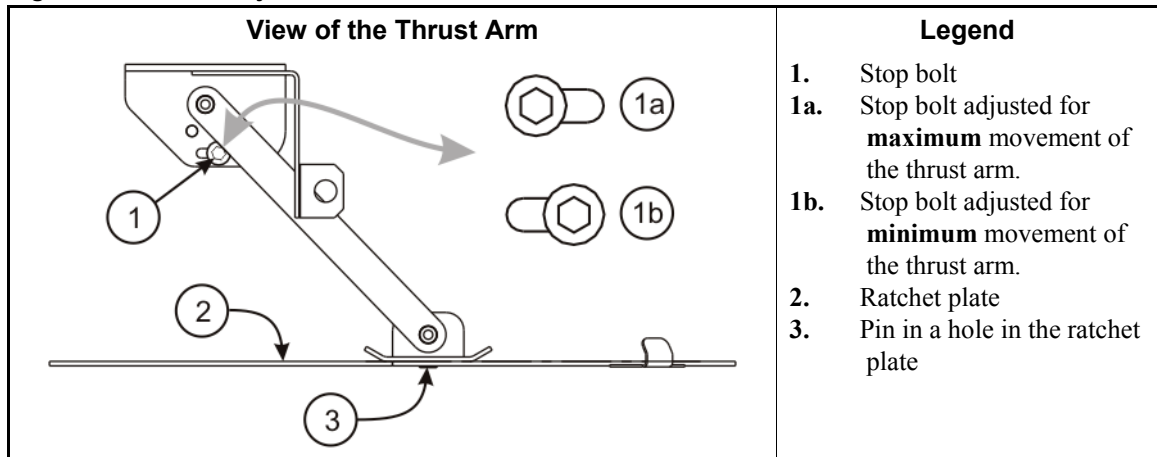
WARNING 1: Risk of death or severe injury—The container and ram move independently. During operation, these components move without warning. These components can also move down with power off. Spaces can close and cut off your arm.

- Keep personnel not necessary for this maintenance clear of the machine.
- Use special caution when you use the key that bypasses the door guards for maintenance.

The pin on the bottom of the ratchet arm must fall in the center of a hole in the ratchet turn plate each time the platen goes up. You adjust this with the stop bolt (Figure 5, Item 1) which you can move right or left in its slot, then tighten. You will use the Manual mode in this procedure. Each time that you move the ram up and down, you must move it up fully to simulate the automatic operation of the press. This is necessary to get the correct adjustment of the ratchet arm.

1. Put the stop bolt at the center of the slot and tighten it. This will let the arm have moderate movement.
2. Use the Manual mode. Move the ram up fully. Move the ram down until the turn plate is approximately two inches (50 mm) below the bottom of the ratchet arm. The first time that you do this, it is possible that the pin on the ratchet arm will not be aligned with a hole. This step will align the holes in the turn plate with the pin.
3. Look at the position of the pin on the ratchet arm and the hole it will go in. If the pin will not go in the center of the hole, refer to Figure 5. Adjust the stop bolt as follows:
 - Move the bolt to the right for less movement of the arm. The pin will go in the hole near the front edge (the edge that the pin pushes).
 - Move the bolt to the left for more movement of the arm. The pin will go in the hole near the rear edge (the edge the pin moves away from).
4. Do steps 2 and 3 again until you get the correct adjustment.
5. Move the ram up and down continuously until the diaphragm makes one full turn to make sure that the adjustment is correct.

Figure 5: Where to Adjust the Thrust Arm



— End of BIPPM20 —