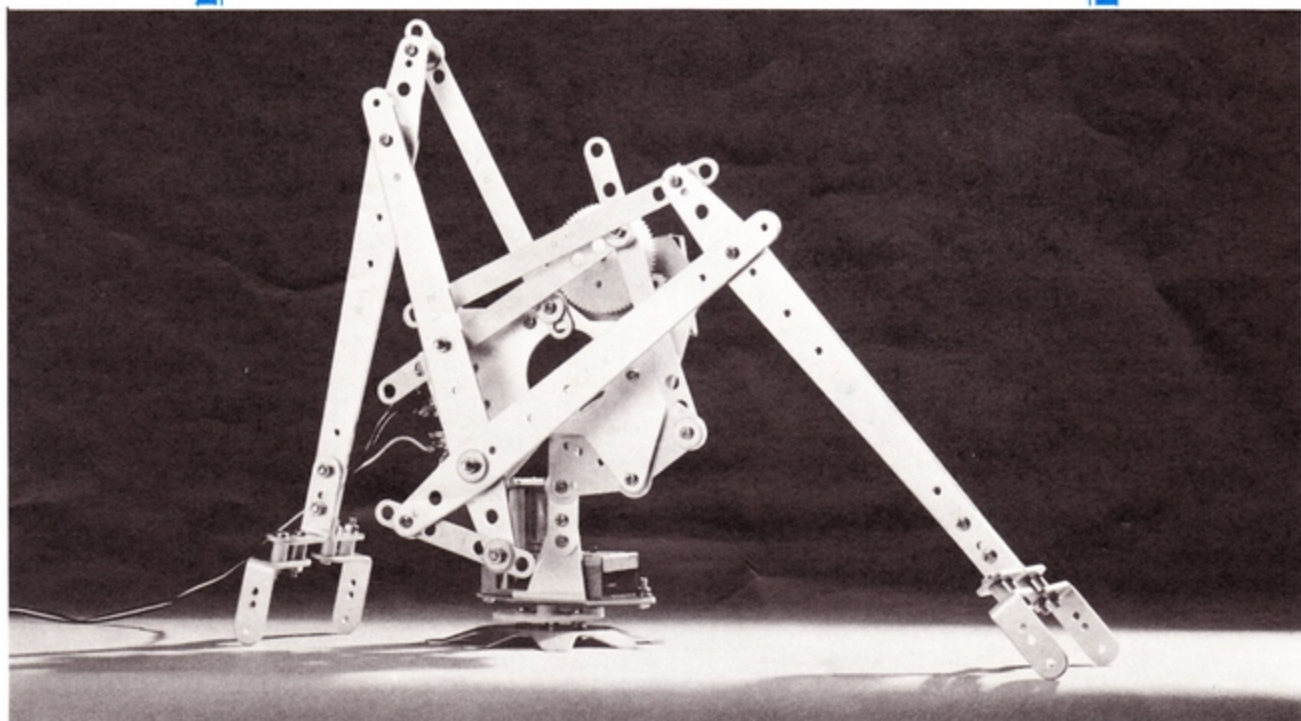


## THE INCHWORM



The Mechanical 3 can be assembled into three animals; the Snake, the Spider and the Inchworm. To assemble an animal carefully follow the instructions as directed below:

Part numbers shown in blue indicate "special" hardware.

### Color Code

- Parts to be attached are shaded blue in each step
- Assembled parts they attach to are shaded gray
- Heavy blue line shows where parts attach and order in which hardware is assembled

**NOTE:** *Be very careful to assemble hardware correctly and use designated holes only.*

Tighten hardware securely to insure precise movement of parts. Always note starred sections before assembling. **NEVER FORCE A CONNECTION.** Go back over the directions to find an assembly error.

**DO NOT TOUCH MOVING CONNECTIONS WHILE OPERATING MECHANICAL.**

Recommended for children ten years and over.

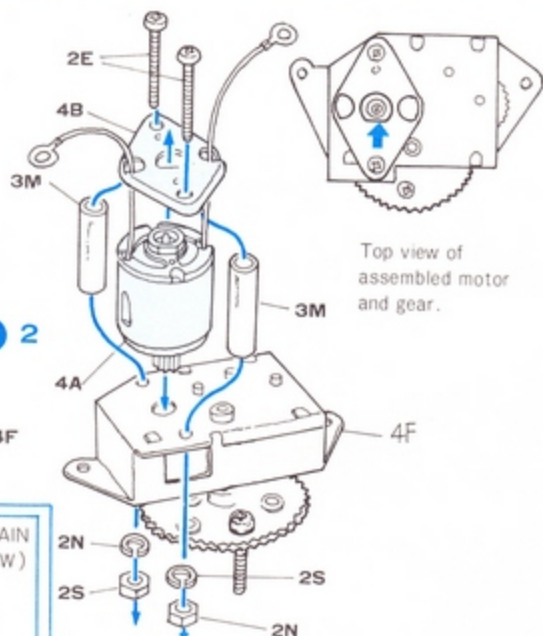
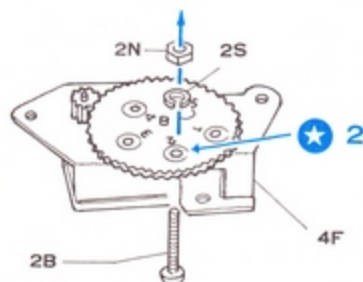
For assembly of the Mechanical inchworm the following parts are necessary:

parts	piece	parts	piece
MB-1	1	2M	27
MB-2	1	2N	49
MB-3	1	2S	46
R-1	4	3A	13
R-2	2	3B	5
R-3	4	3H	2
R-4	1	3J	11
R-5	2	3K	2
R-6	1	3M	4
R-7	1	3R	1
R-8	8	4A	2
1A	2	4B	2
1B	2	4K	1
1C	5	4L	1
1D	13	4M	1
1E	18	4N	1
2A	22	4F	1
2B	15	4S	1
2C	3		
2E	5		

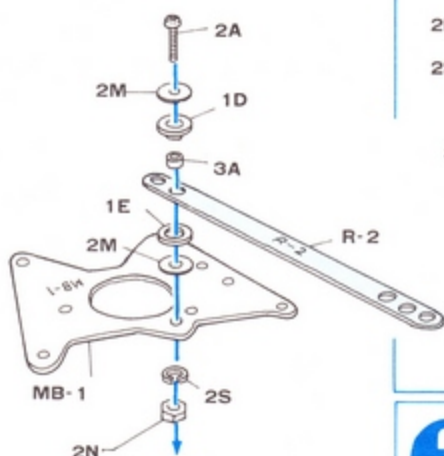
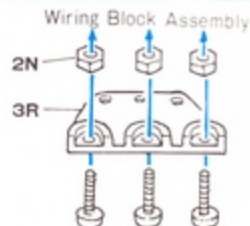
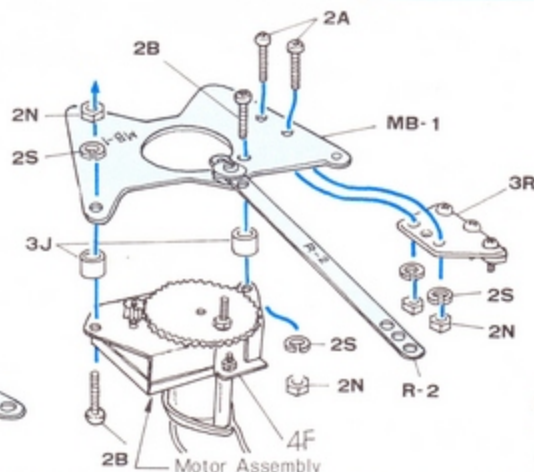
SEE GENERAL PARTSLIST ON PAGES 23 AND 24 BEFORE BEGINNING ASSEMBLY.

# 1 MOTOR ASSEMBLY: ATTACH MOTOR TO GEAR BOX.

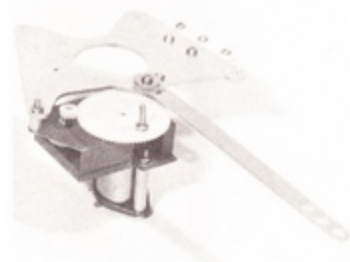
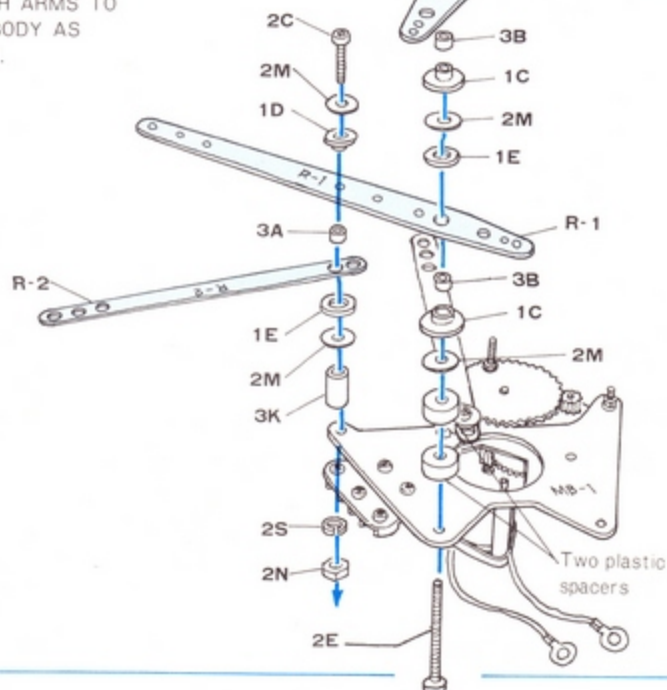
- ★ Insert 2B screw in #2 hole before assembling.



# 2 ATTACH ARM R-2 TO MAIN BODY (SEE LEFT BELOW) THEN ATTACH MOTOR ASSEMBLY AND WIRING BLOCK ASSEMBLY.



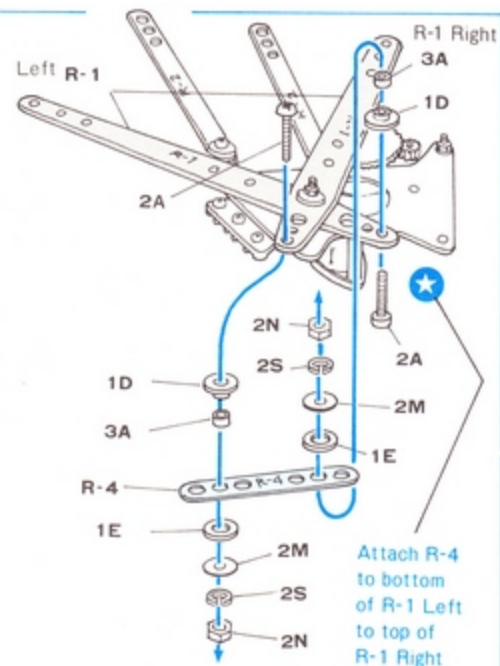
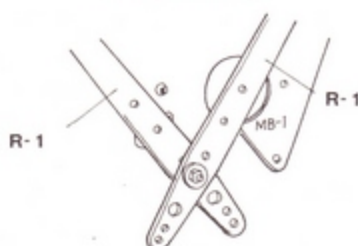
# 3 ATTACH ARMS TO MAIN BODY AS SHOWN.





4

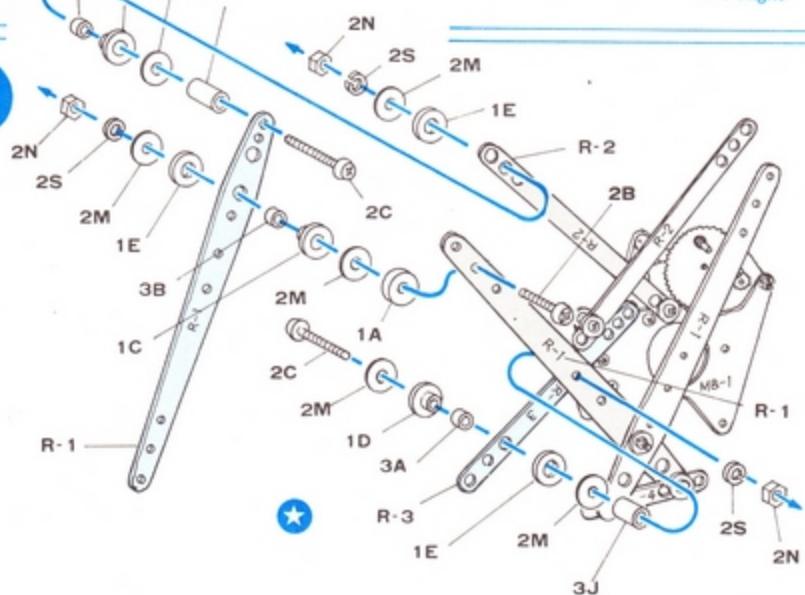
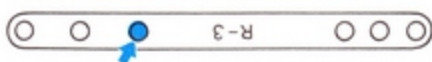
Position arms  
as shown before  
connecting R-4.  
ATTACH ARM R-4.



Attach R-4  
to bottom  
of R-1 Left  
to top of  
R-1 Right

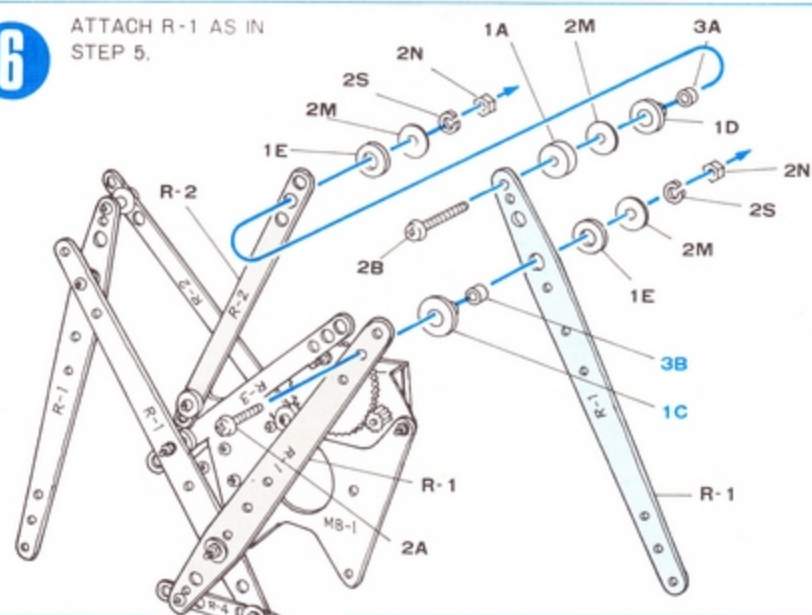
5

STEP5: ATTACH ARMS  
R-3 AND R-1 AS SHOWN.

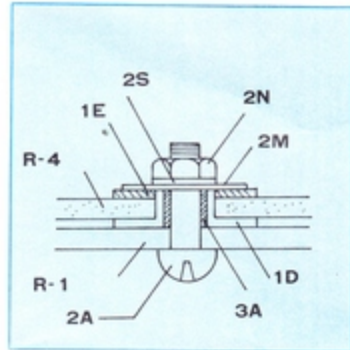


6

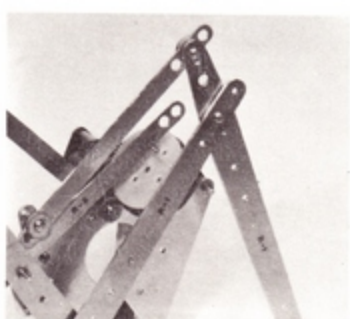
ATTACH R-1 AS IN  
STEP 5.



Hardware shown  
assembled in cross  
section.



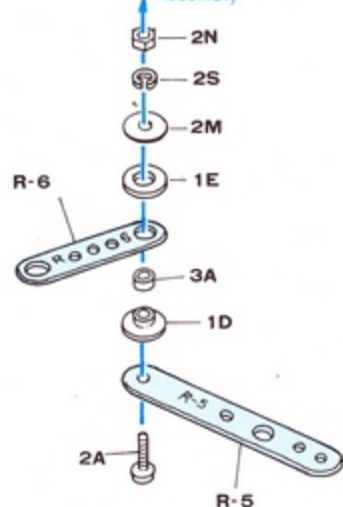
Attach R-3 to R-1 arm  
shaded gray using end  
with group of holes  
spaced farthest apart.



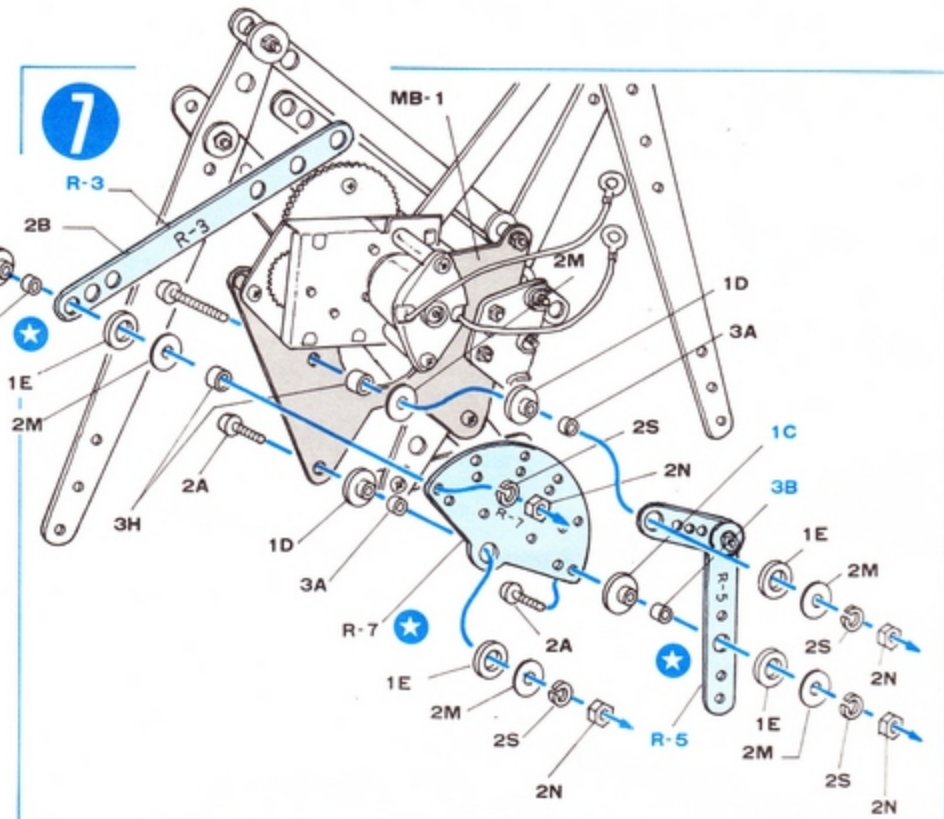
STEP 7: ATTACH ARM R-3 TO PLATE R-7. ATTACH SAME R-7 TO MAIN BODY. ATTACH R-6/R-5 ARM ASSEMBLY TO R-7 AND MAIN BODY.



R-6 • R-5 Arm Assembly

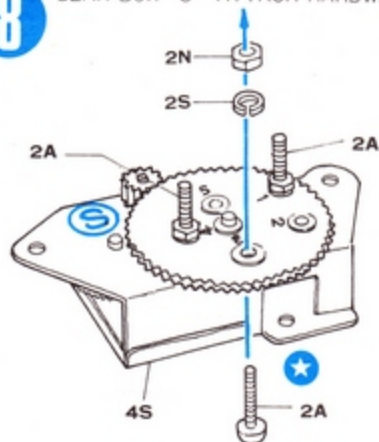


7

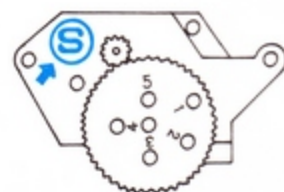


8

GEAR BOX "S" - ATTACH HARDWARE

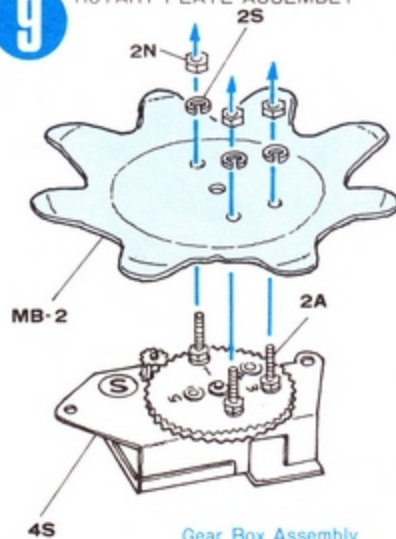


Attach screws 2A through holes # 1, # 3 and # 4.



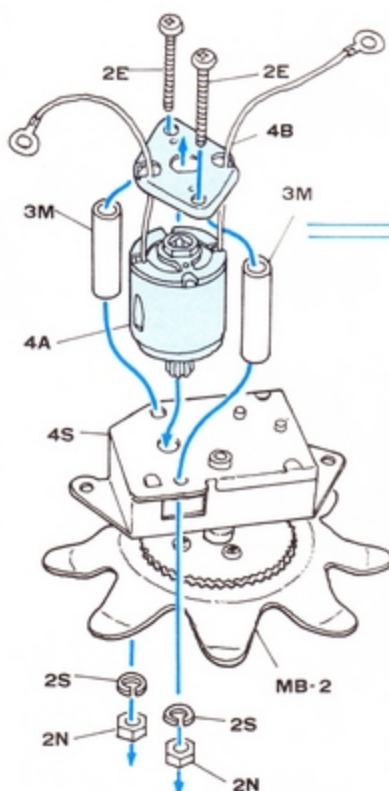
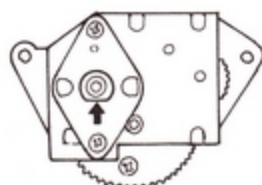
9

ROTARY PLATE ASSEMBLY



Gear Box Assembly

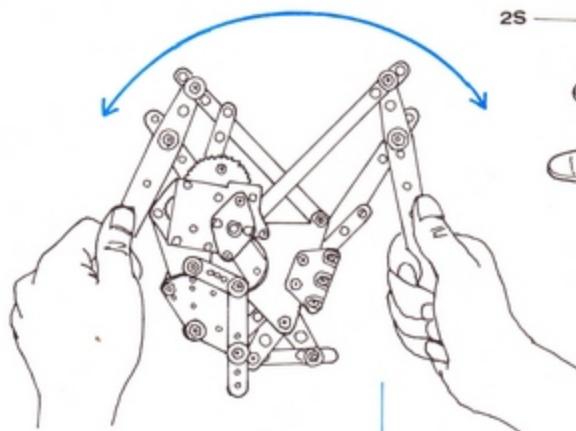
Top view of assembled motor and gear unit.



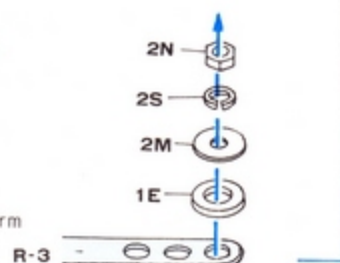
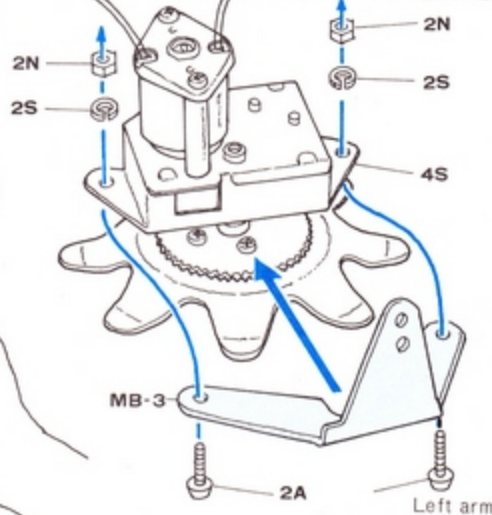


10

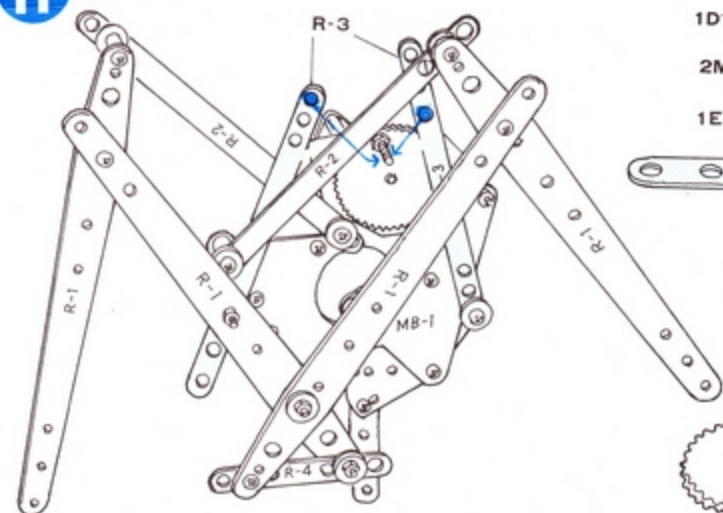
ATTACH BRACKET TO ROTARY PLATE ASSEMBLY.



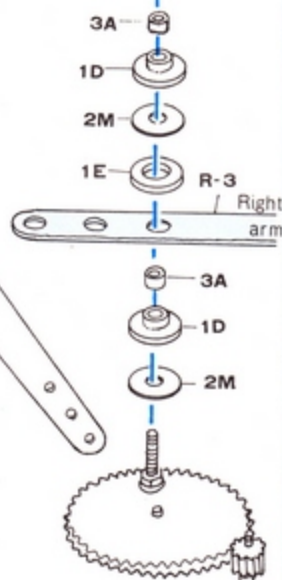
Before attaching arms to gear arms should move smoothly and correctly in directions shown. If movement is not smooth, check to see all parts are correctly attached and bushings have been inserted correctly.



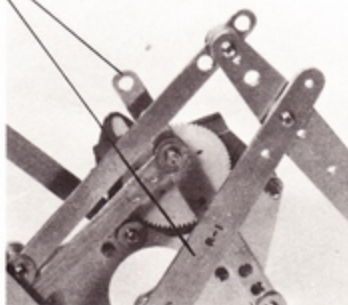
11



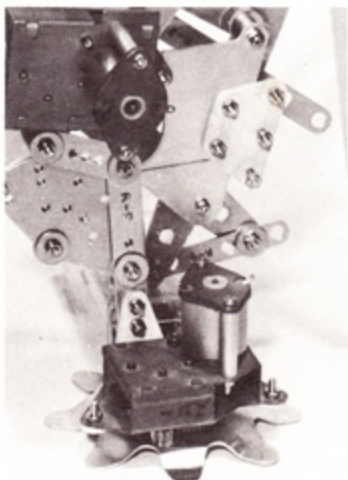
STEP 11: ATTACH GEAR AS SHOWN.



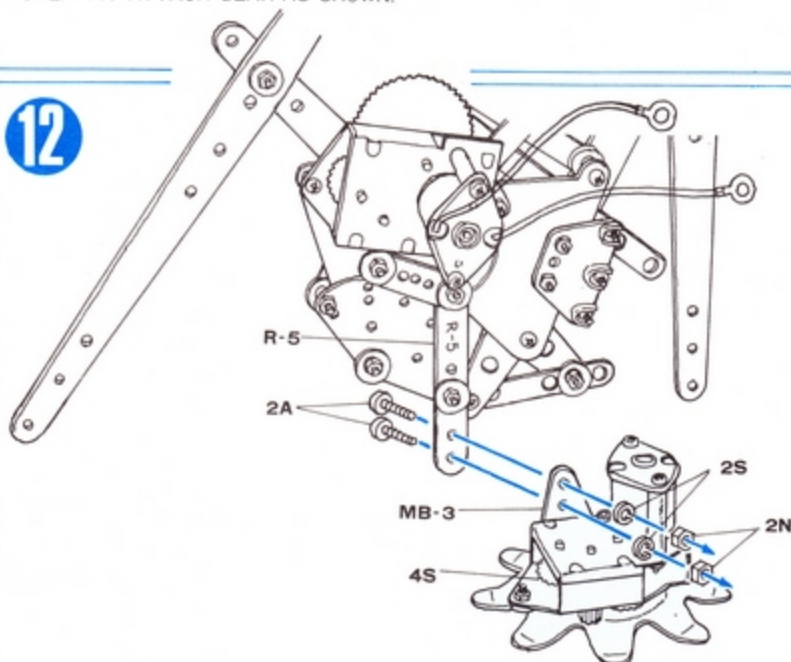
R-3 ARMS



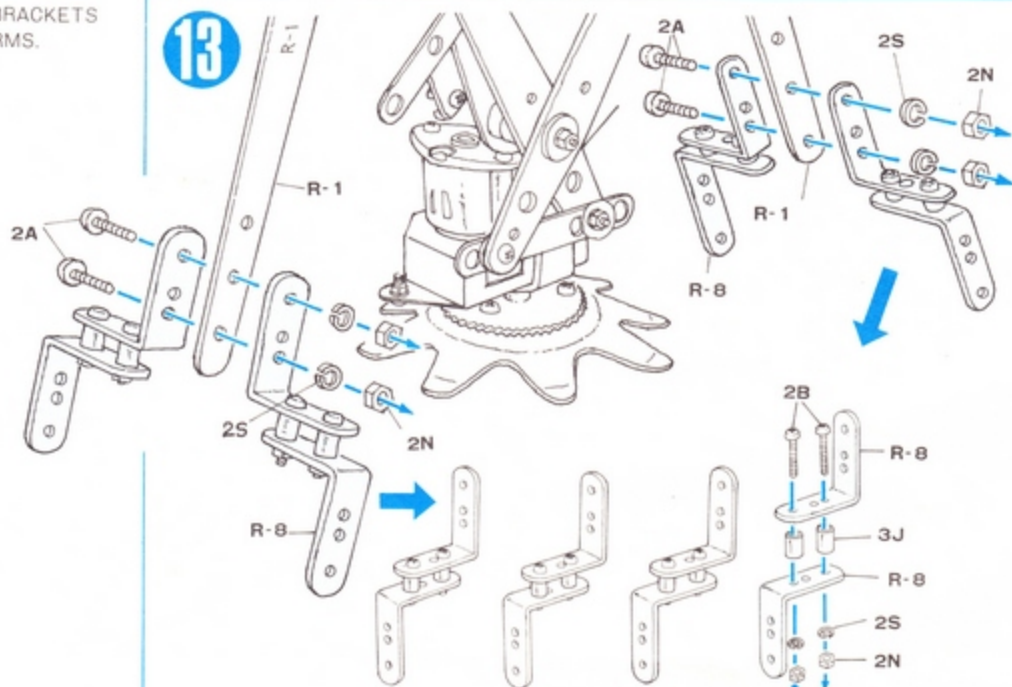
STEP 12: ATTACH ROTARY PLATE ASSEMBLY.



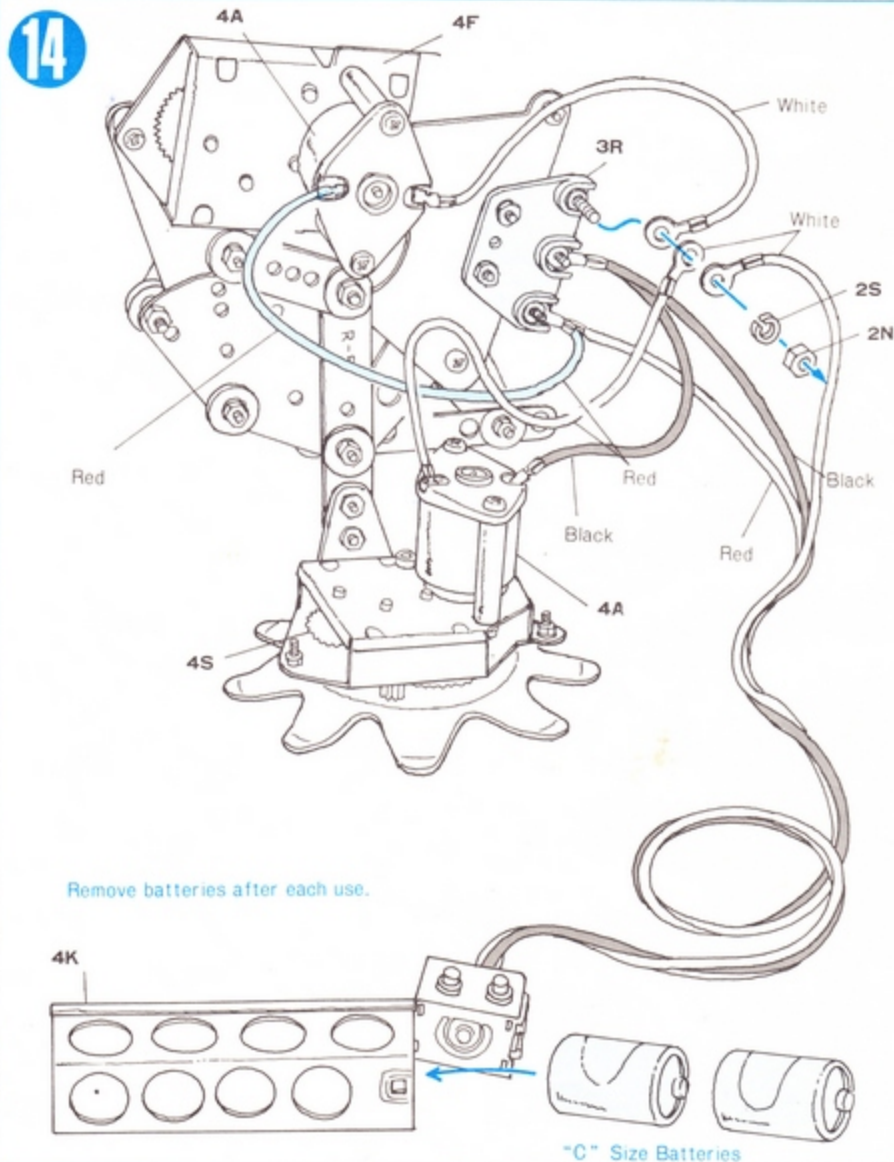
12



STEP 13: ASSEMBLE BRACKETS  
AND ATTACH TO R-1 ARMS.



STEP 14: WIRE INCHWORM  
TO BATTERY BOX.



Lubricate moving  
connections using silicon  
or machine oil.

KEEP FINGERS AWAY FROM  
MOVING PARTS WHEN IN  
OPERATION.

NOTE: If gears do not  
turn after lead wires  
are securely connected.

1. Check position of  
each wire.
2. Check wiring box to  
make sure it is secure.

Remove batteries after each use.

"C" Size Batteries