

# SUPPORT MANUAL



GSRT 34 L36-3032W1-00067-5

1. 20 201 200000 20000000 100 1000 10000

1. 10 10000 1000

10000 10 1000

100 10000 100000000

100 100 10000

1. 100 10 10 1000 1000000000 1000 1000 100

1000 100 1 1000 1000 1000000 1000000

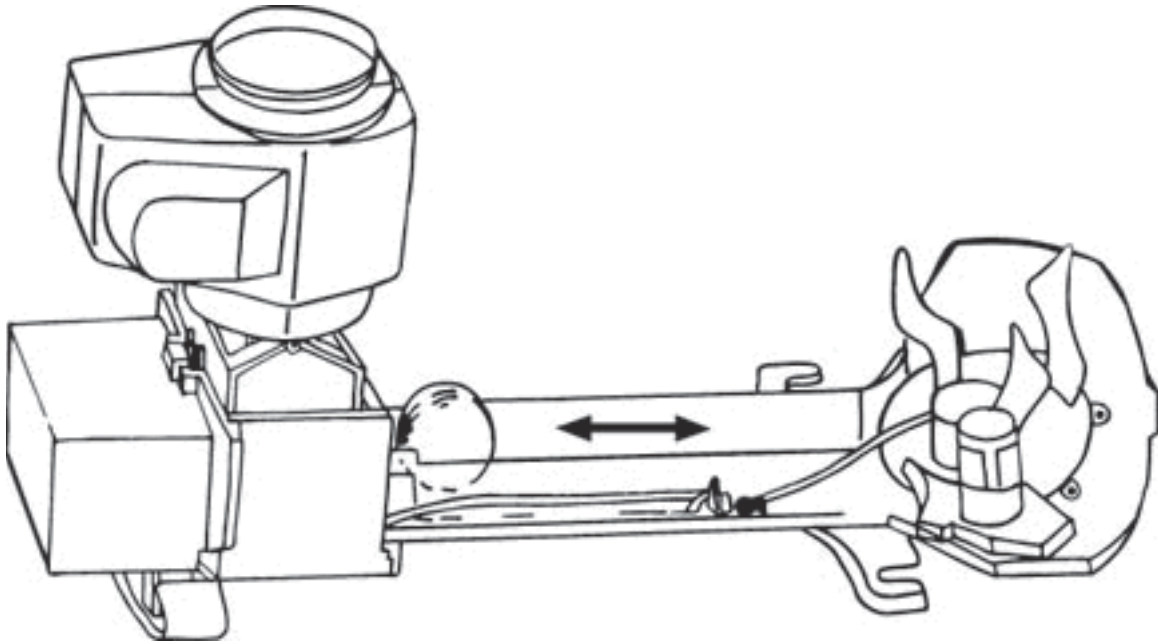
PARTS AND ASSEMBLY DIAGRAMS

# TABLE OF CONTENTS

## Parts and Assembly Diagrams

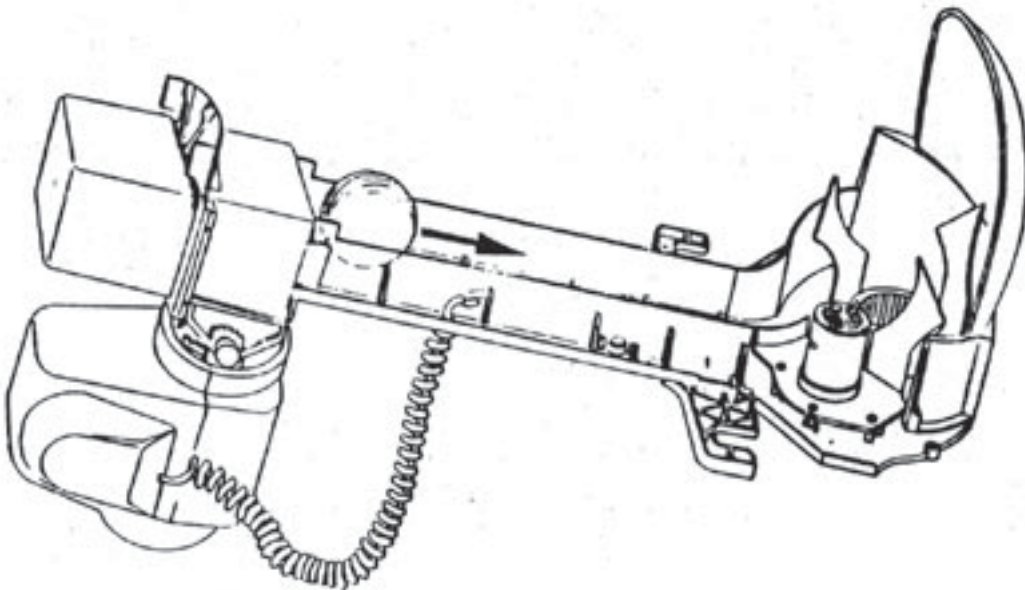
Figure A: Testing Ball Feed Channel .....	pg. 2
Figure B: Oscillator Gear and Motor .....	pg. 3
Figure C: Oscillator Mechanism and Housing .....	pg. 4
Figure D: Ball Speed Motor and Wheels .....	pg. 5
Figure E: Robot Head Assembly.....	pg. 6
Figure F: Oscillator Assembly.....	pg. 7
Figure G: Upper Housing.....	pg. 8
Figure H: Upper Guide to Back Panel .....	pg. 9
Figure I: 5-Pin Connector.....	pg. 10
Figure J: Ball Feed Main Gear and Parts .....	pg. 11
Figure K: Ball Feed Motor Assembly .....	pg. 12
Figure L: Ball Feed Motor and Gear.....	pg. 13
Figure M: Net Assembly .....	pg. 14
Figure N: Robot Body Assembly .....	pg. 15
Figure O: Control Box Circuit Board Layout .....	pg. 19
Figure P: Control Box Schematic Diagram.....	pg. 20

# Figure A: Testing Ball Feed Channel for Restrictions

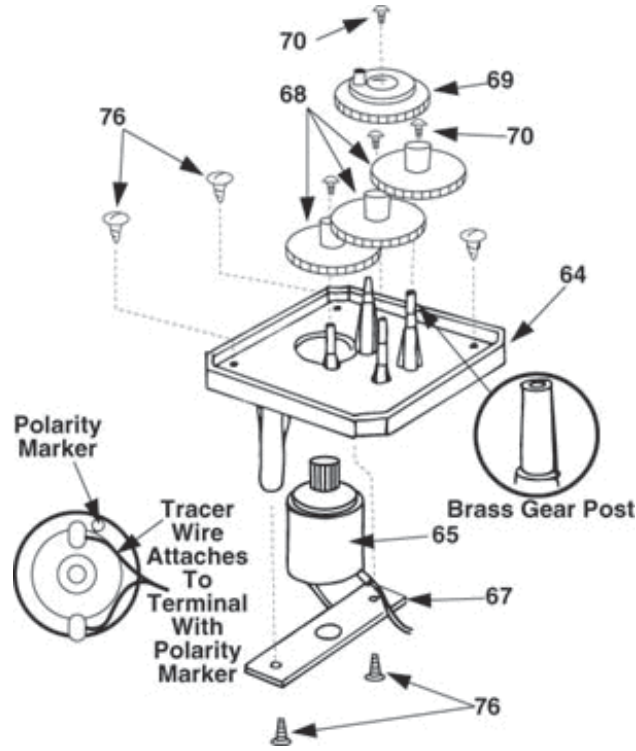


Instructions: Slide ball up and down ball feed channel to make sure it moves freely without hanging up.

For model 1929:

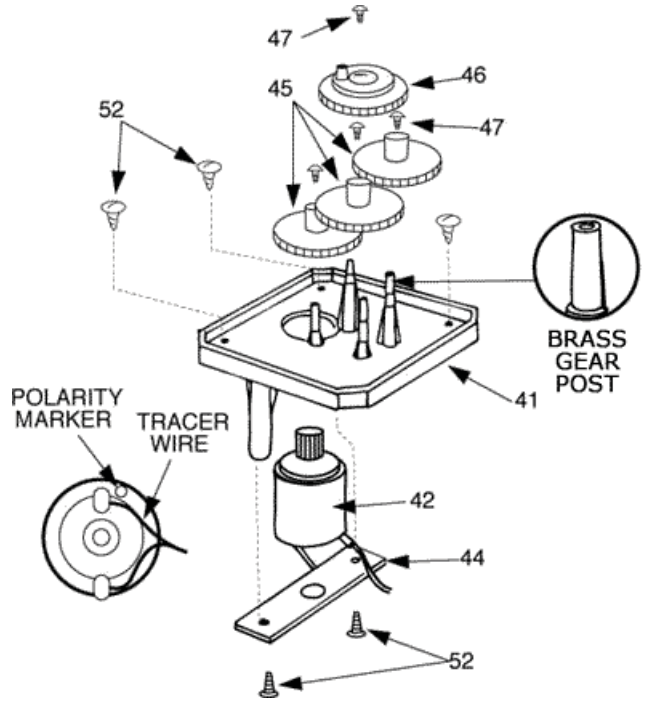
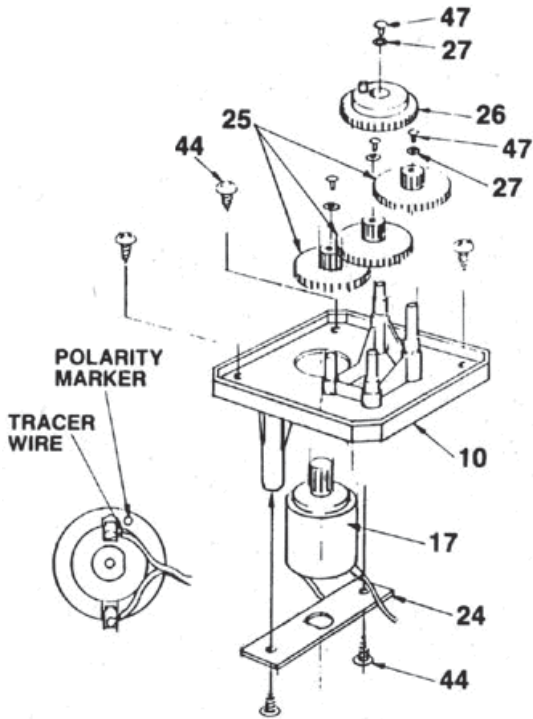


# Figure B: Oscillator Gear & Motor Assembly

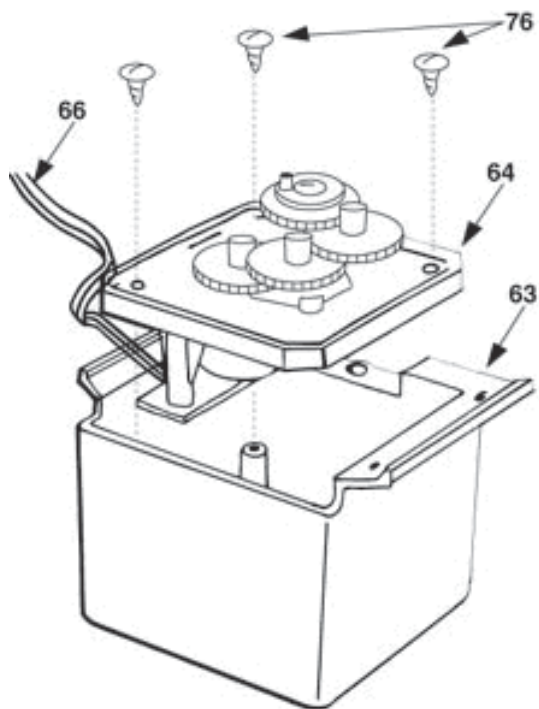


For model 1929:

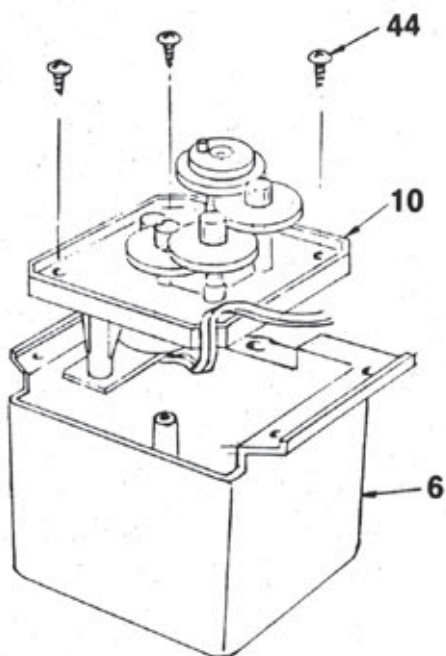
For model Robo-Pong 1000



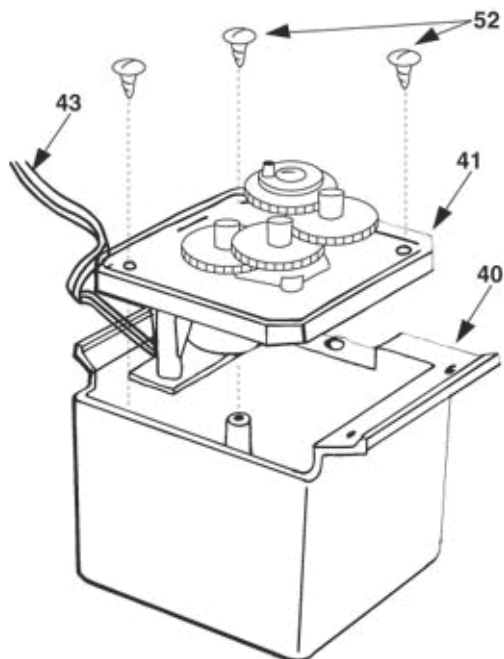
# Figure C: Oscillator Gear and Motor Assembly to Housing



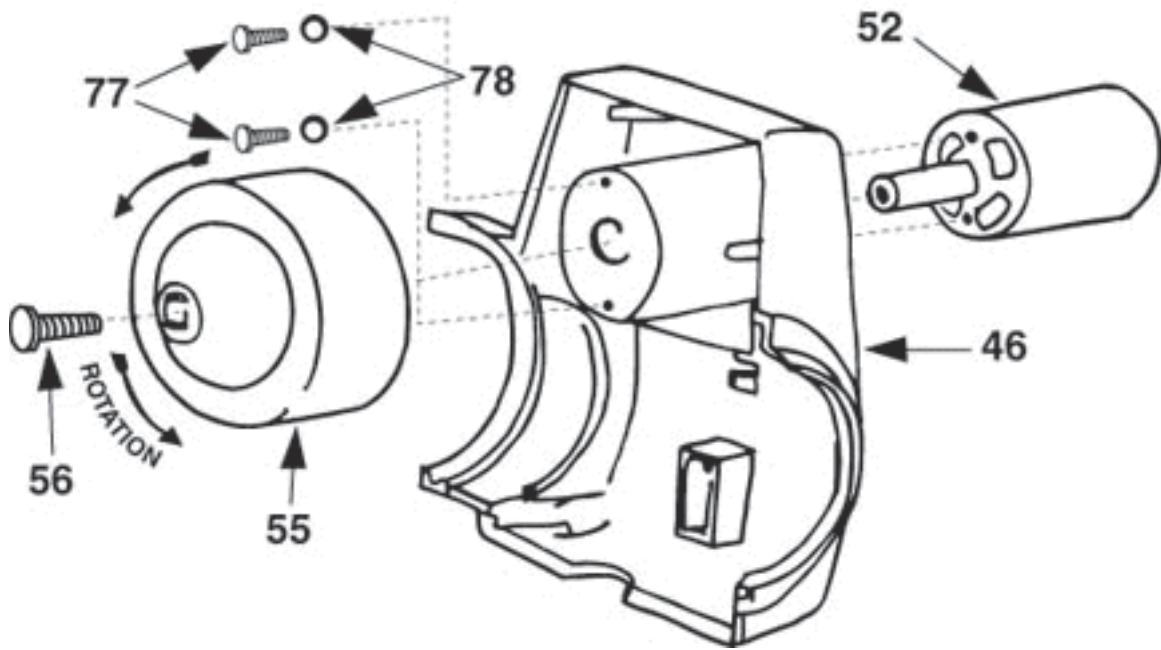
For model 1929:



For model Robo-Pong 1000

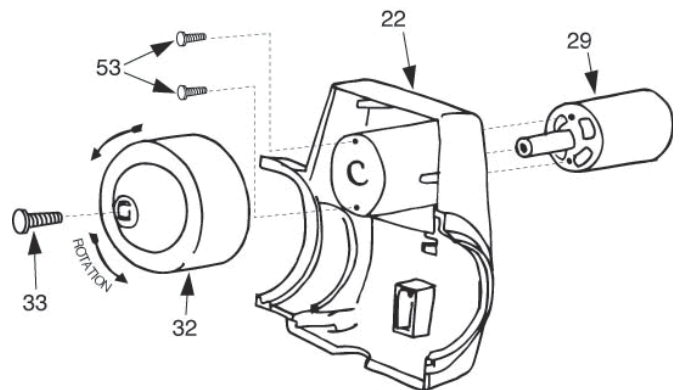
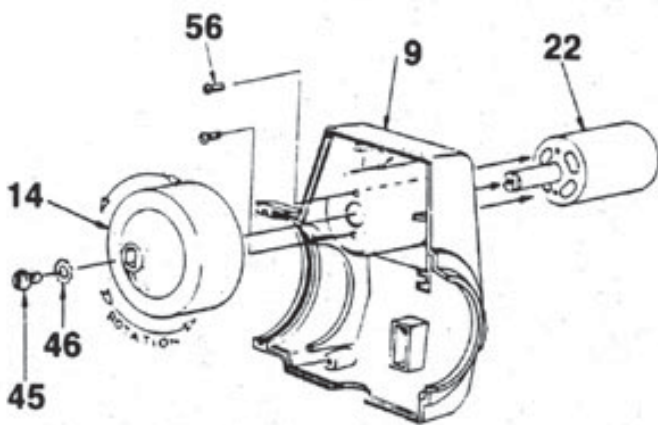


# Figure D: Ball Speed Motor and Wheel to Housing



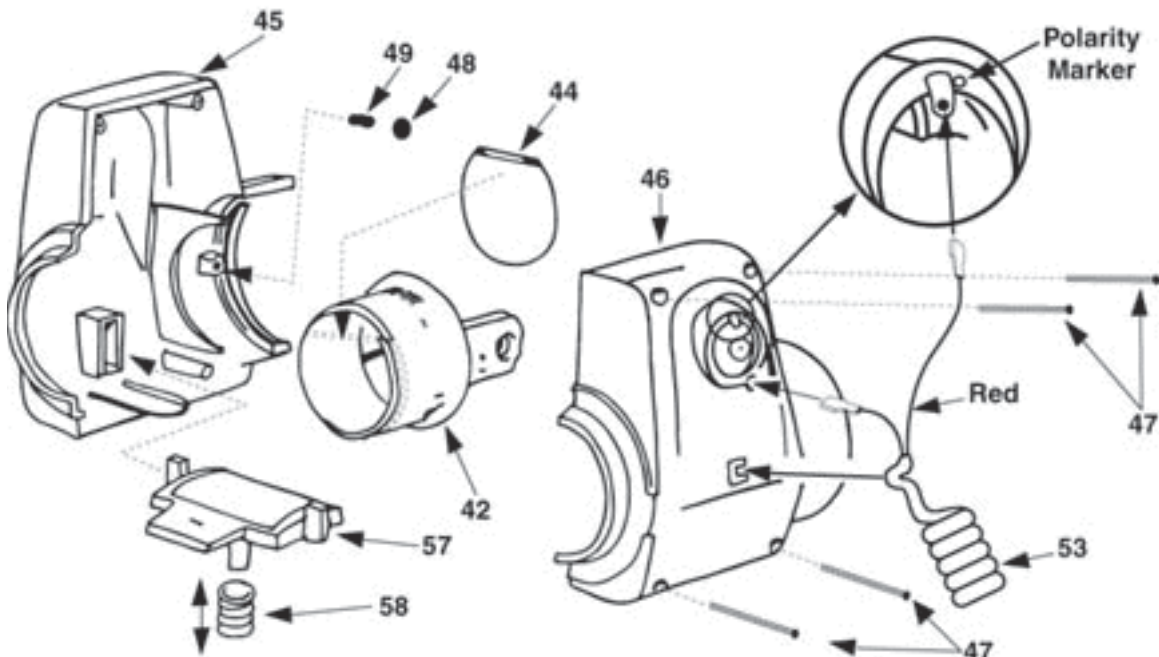
For model 1929:

For model Robo-Pong 1000



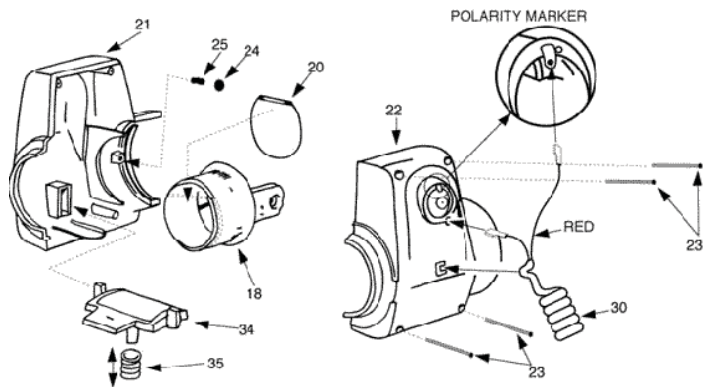
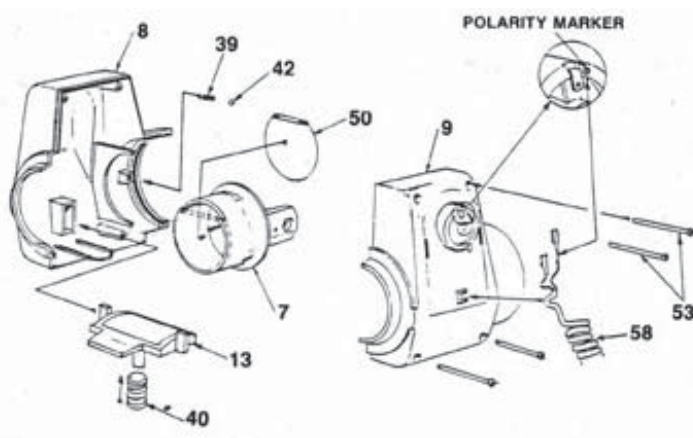
**Warning:** Screw 56 is left-hand threaded!  
Loosen by turning clockwise; tighten by turning counter-clockwise.

# Figure E: Robot Head Assembly



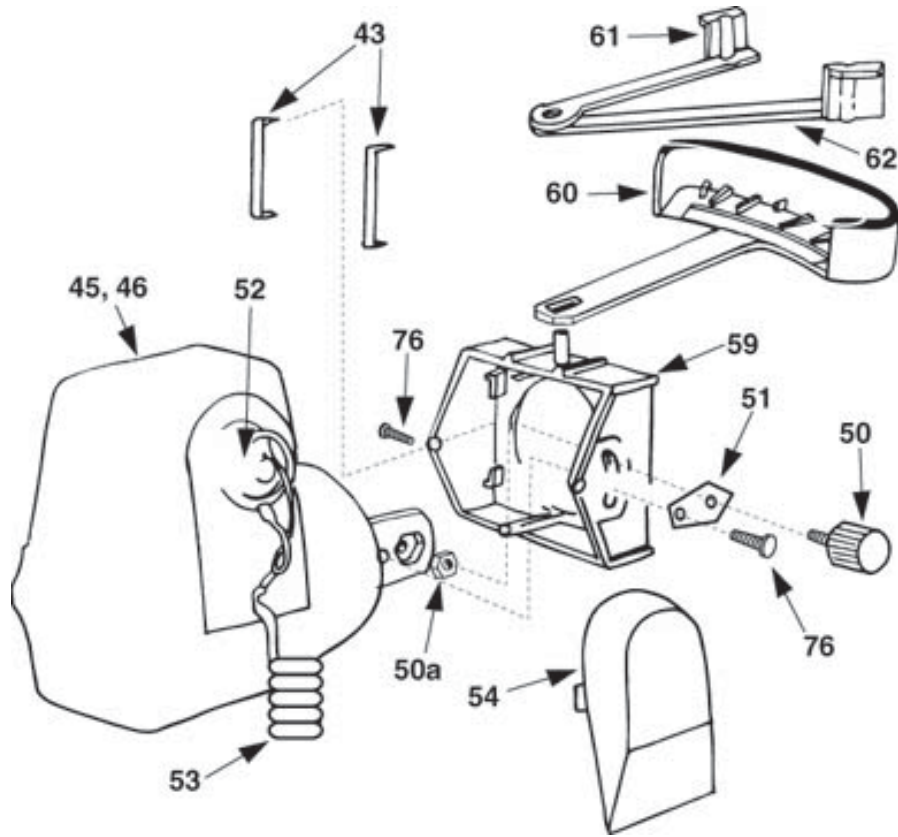
For model 1929:

For model Robo-Pong 1000



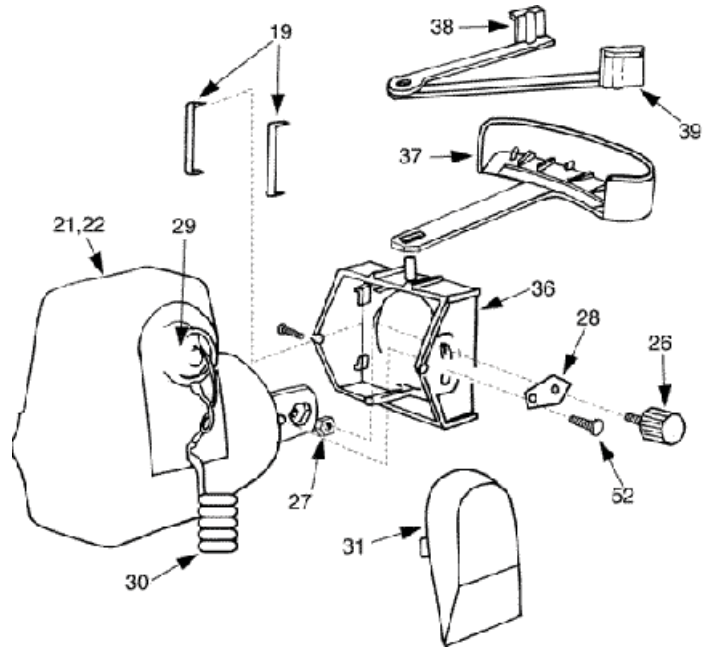
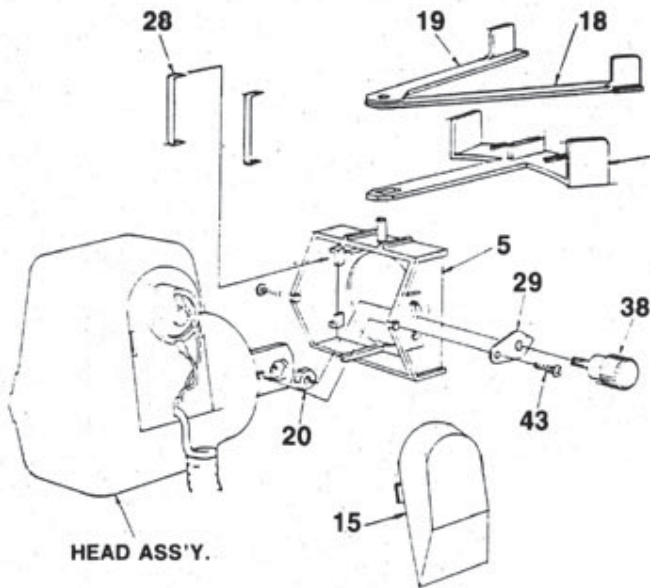
- 1) When disassembling the robot head, take care not to let Steel Ball 48 and Spring 49 fall out of Left Housing 45 since they are both small and easy to lose. Also, it helps if you disassemble on top of a towel or cloth. A small amount of grease or Vaseline will help hold them in place when you reassemble the parts.
- 2) In order for the two halves to come apart split the spin label with a sharp knife or razor at the seam.
- 3) When assembling left and right housings 45 & 46, Friction Block 57 and Spring 58 must be co-pressed slightly in order for the two halves to fit together.

# Figure F: Oscillator Control Assembly



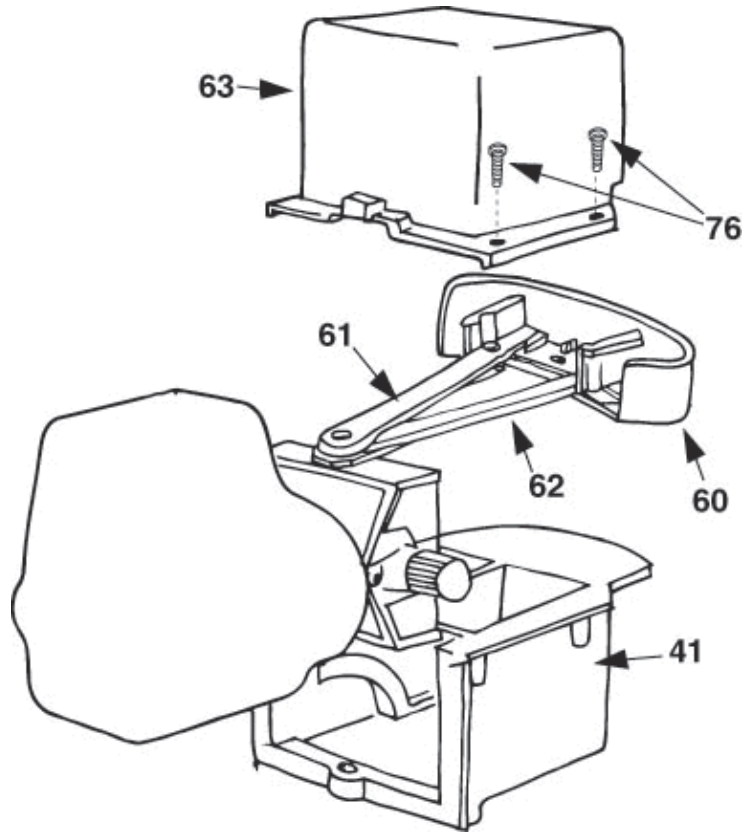
For model 1929:

For model Robo-Pong 1000

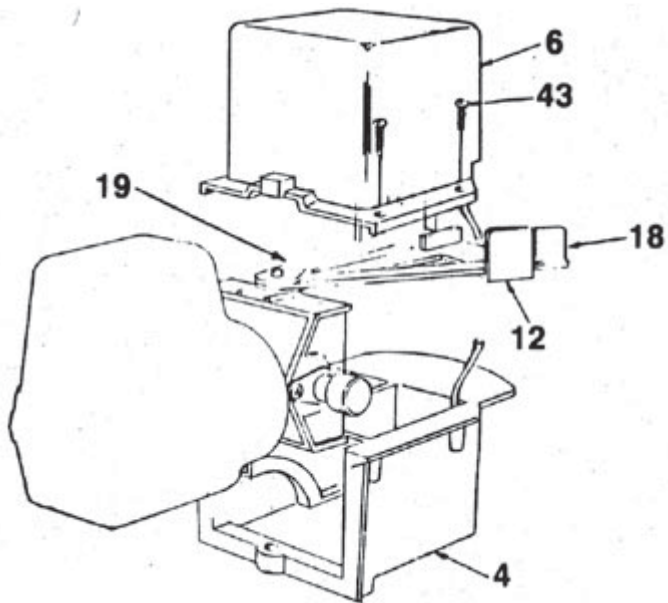




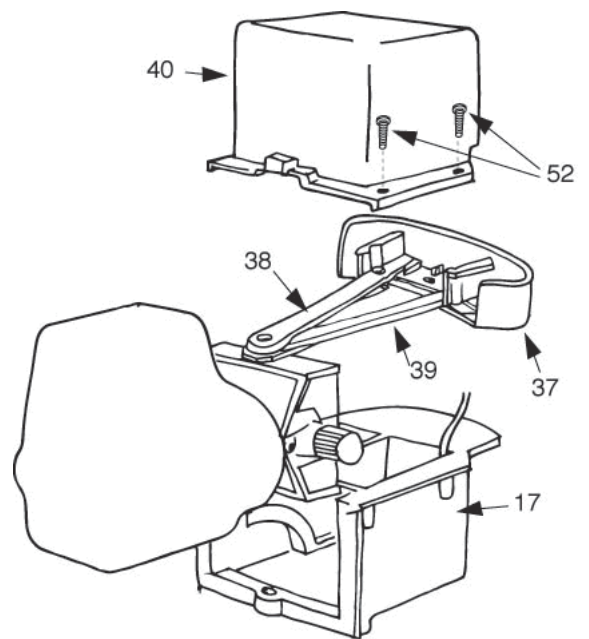
# Figure G: Upper Housing



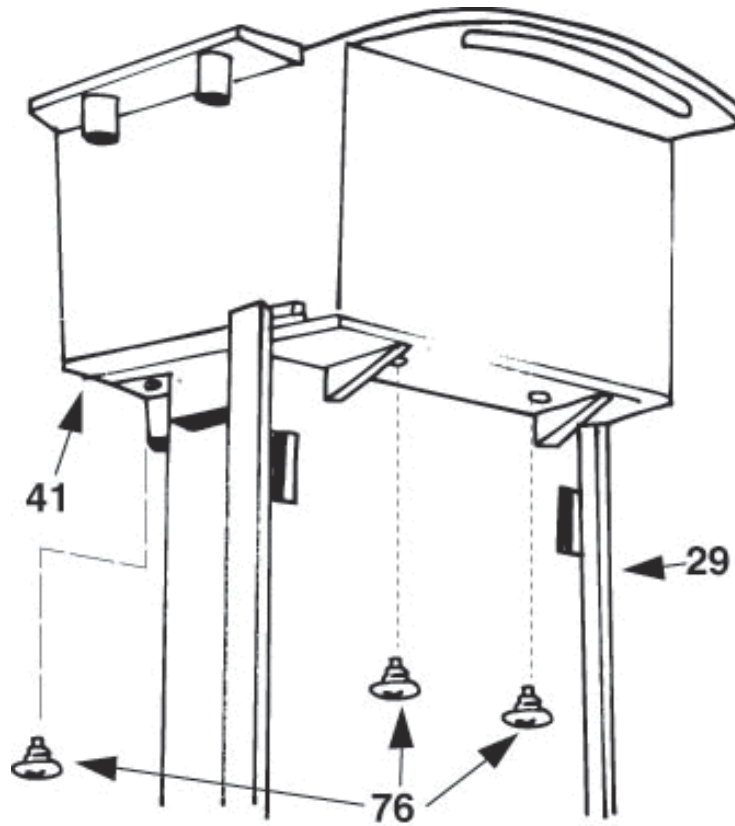
For model 1929:



For model Robo-Pong 1000

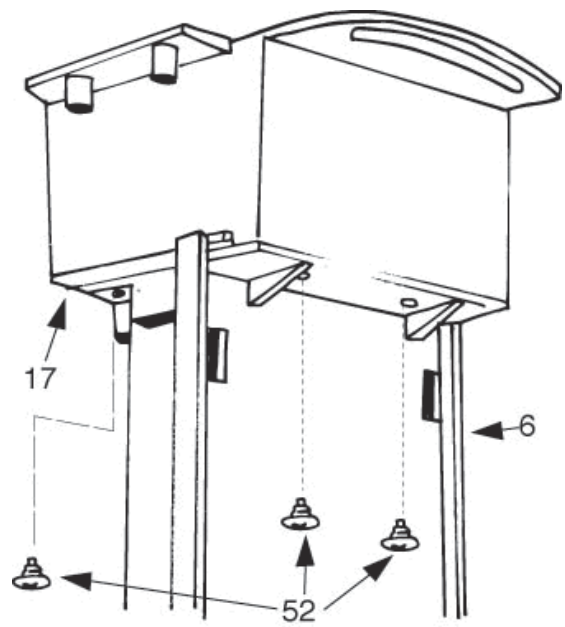
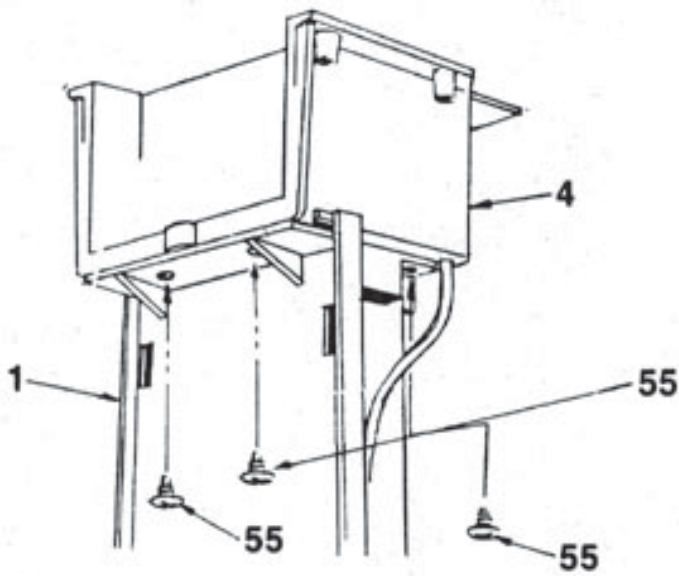


# Figure H: Ball Feed Upper Guide to Back Panel

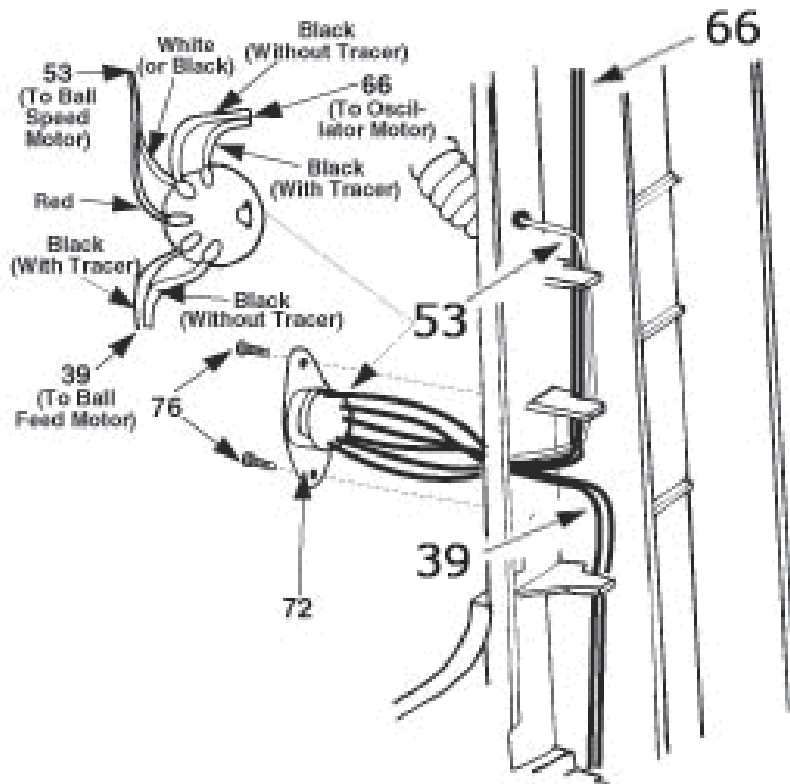


For model 1929:

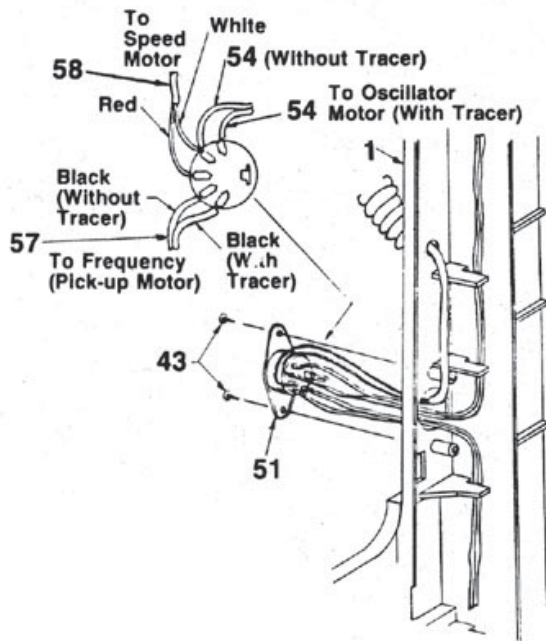
For model Robo-Pong 1000



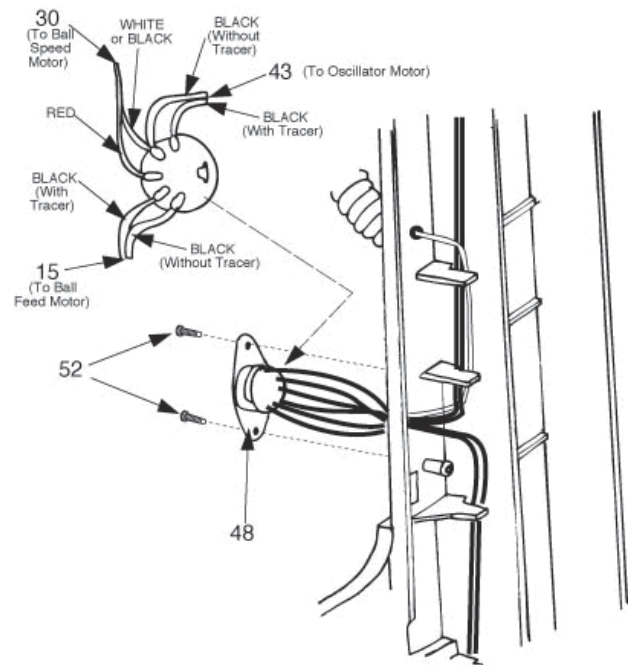
# Figure 1: 5 Pin Connector



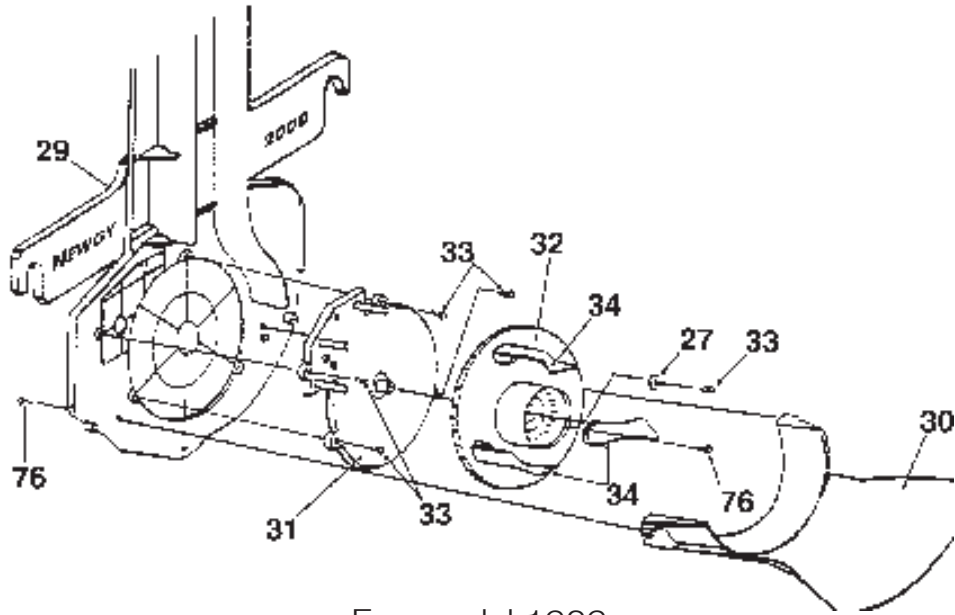
For model 1929:



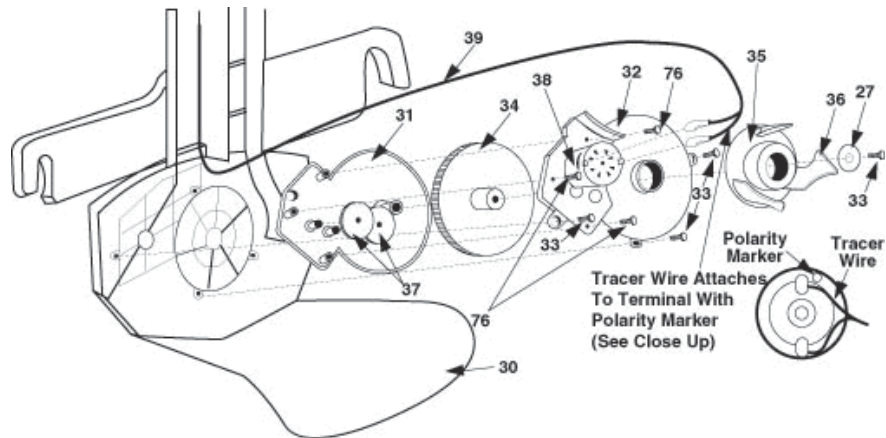
For model Robo-Pong 1000



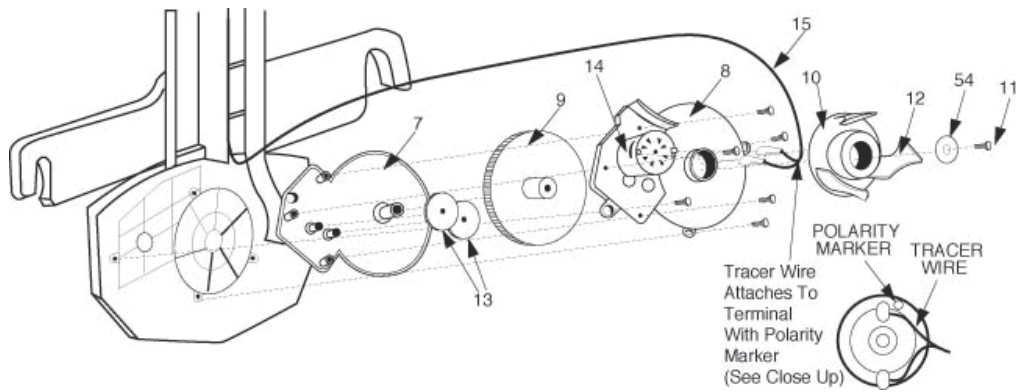
# Figure J: Ball Feed Main Gear and Parts



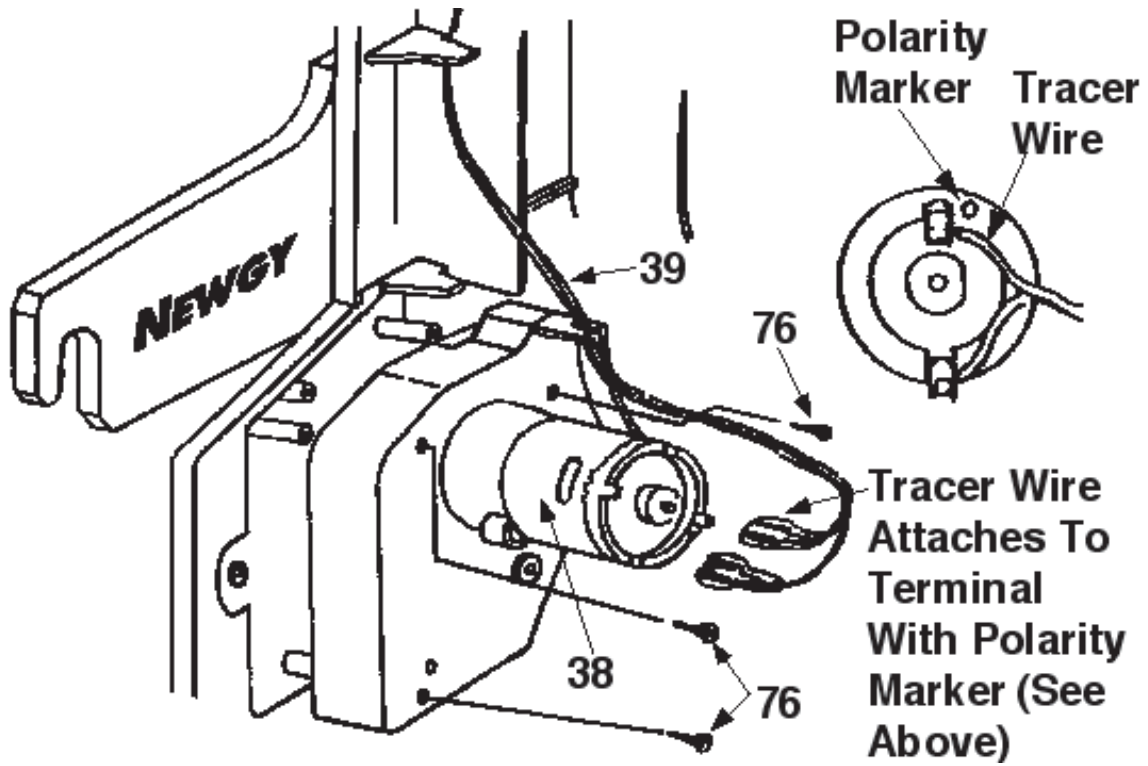
For model 1929:



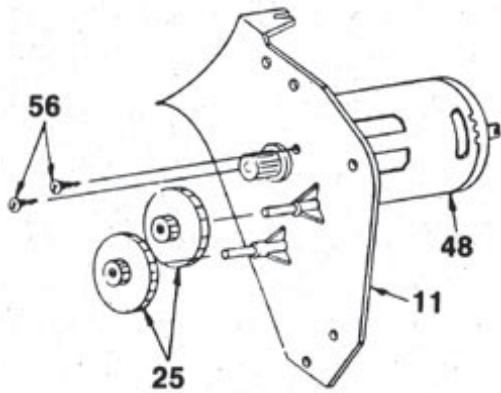
For model Robo-Pong 1000



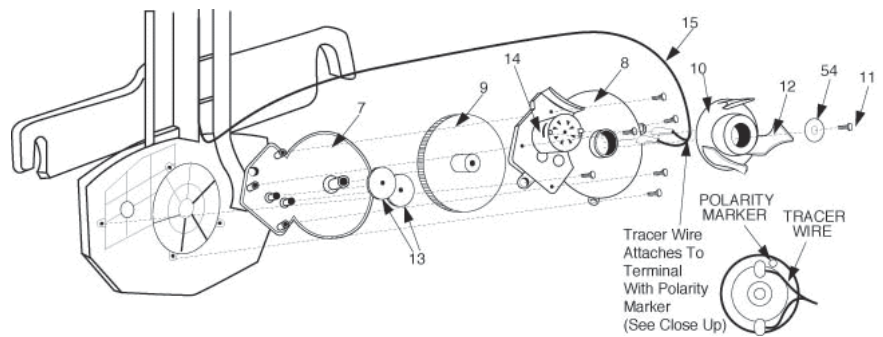
# Figure K: Ball Feed Motor Assembly



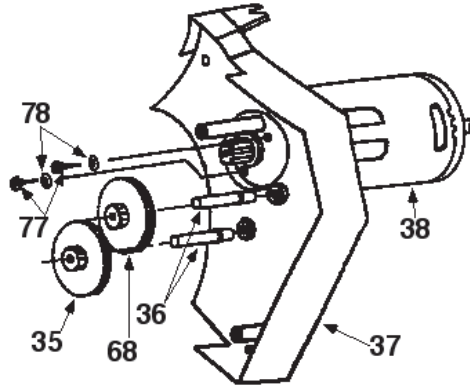
For model 1929:



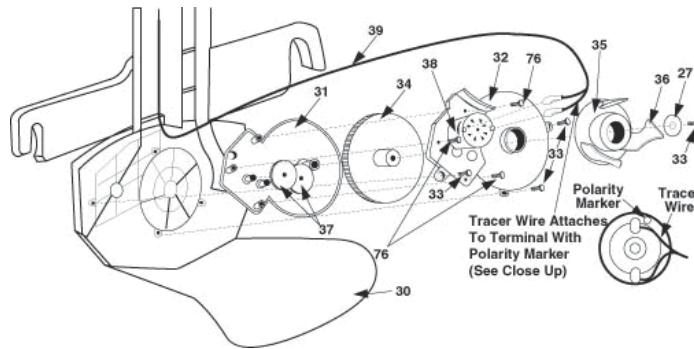
For model Robo-Pong 1000



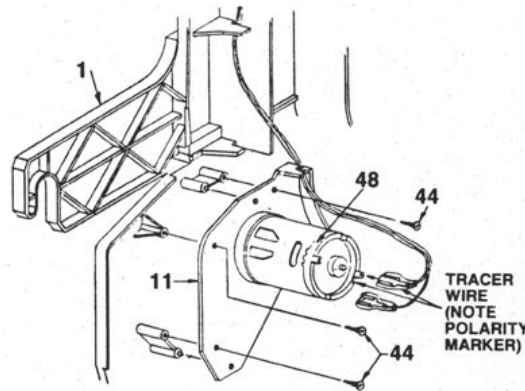
# Figure L: Ball Feed Motor and Gear



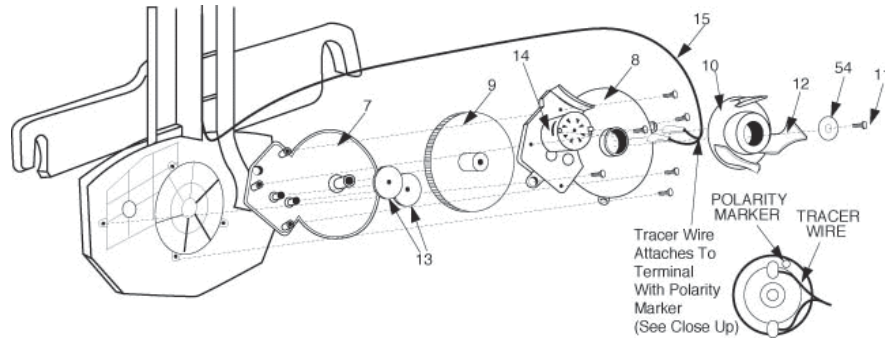
For model Robo-Pong 2000 (manufactured after 1/1/99)



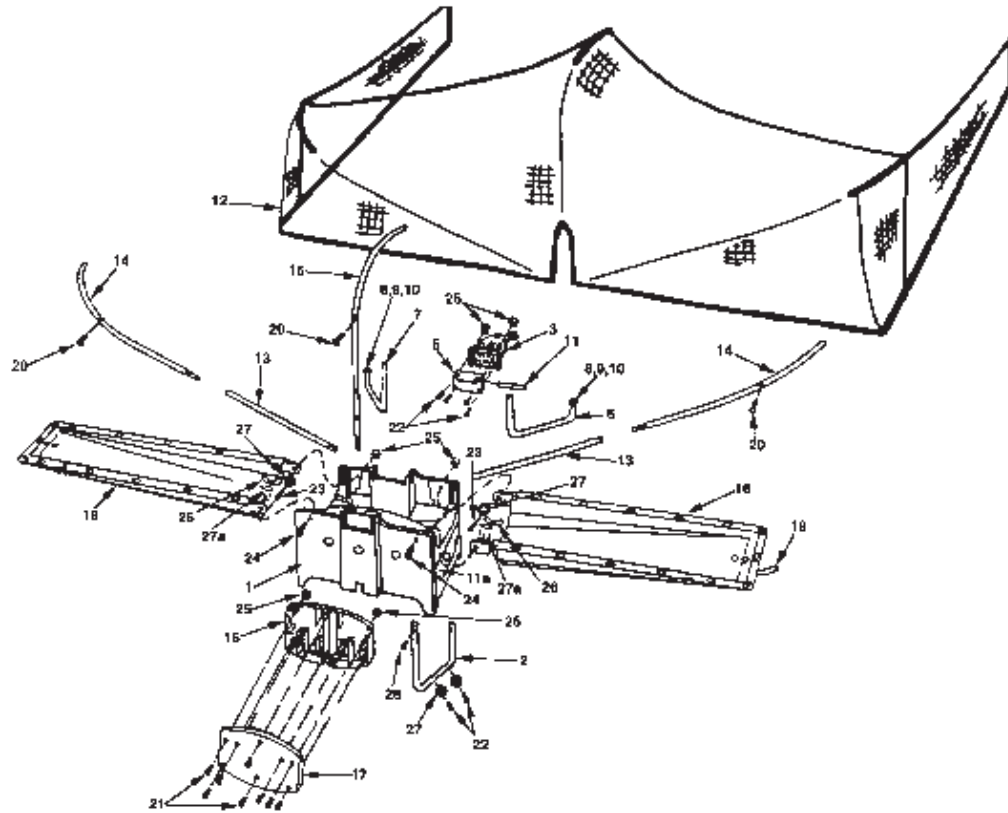
For model 1929



For model Robo-Pong 1000



# Figure M: Net Assembly



For model 1929:

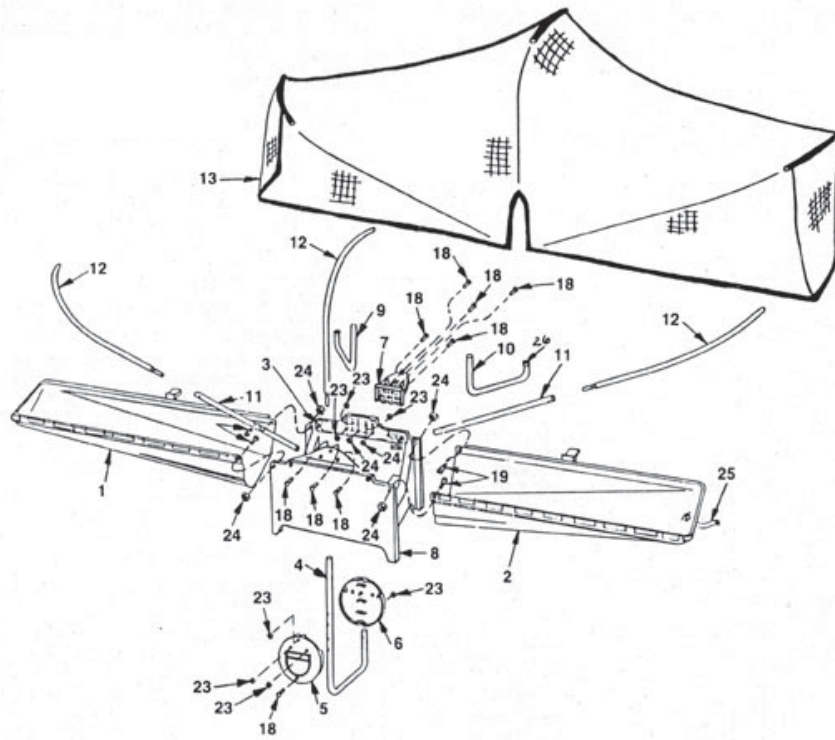
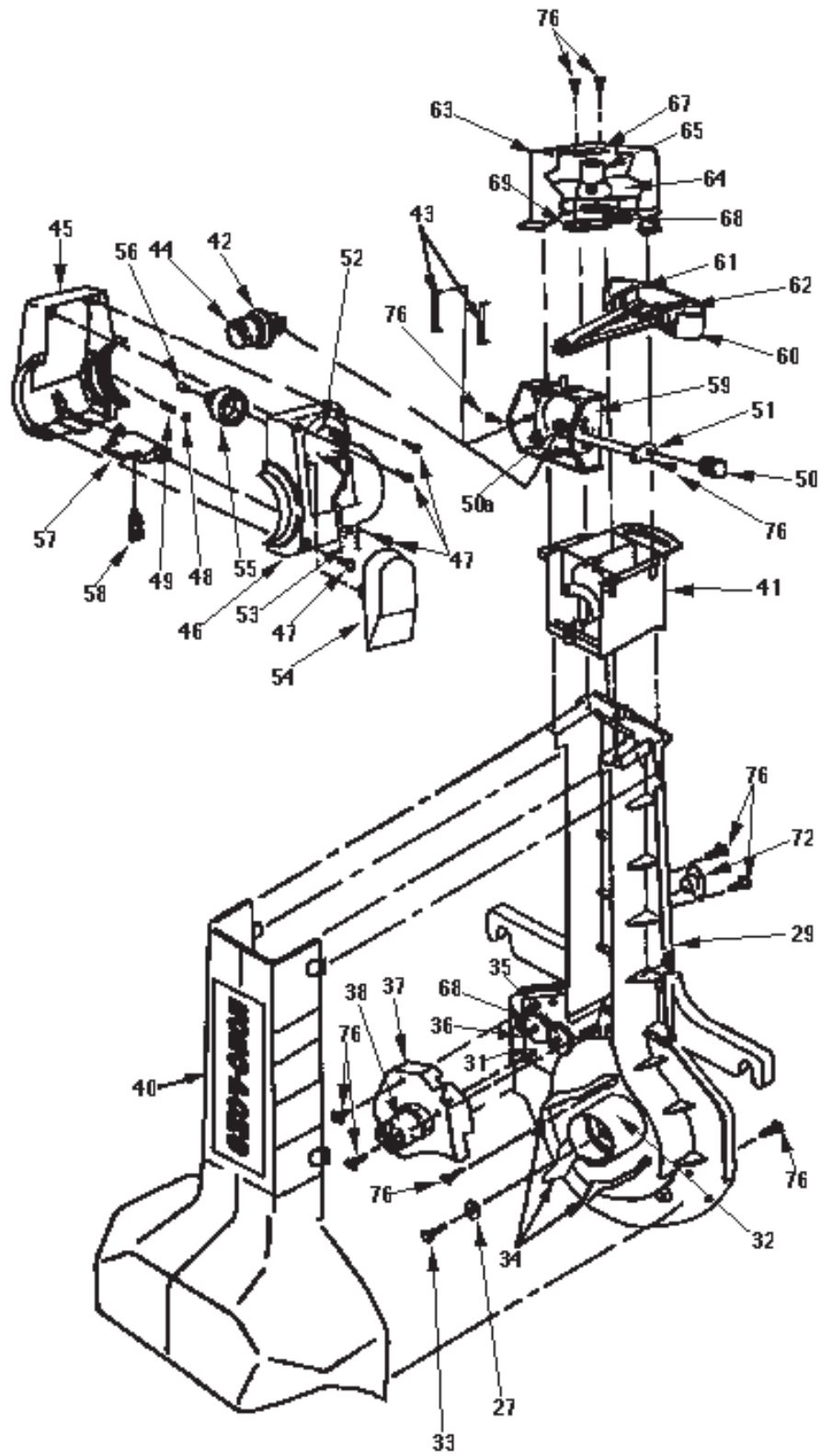


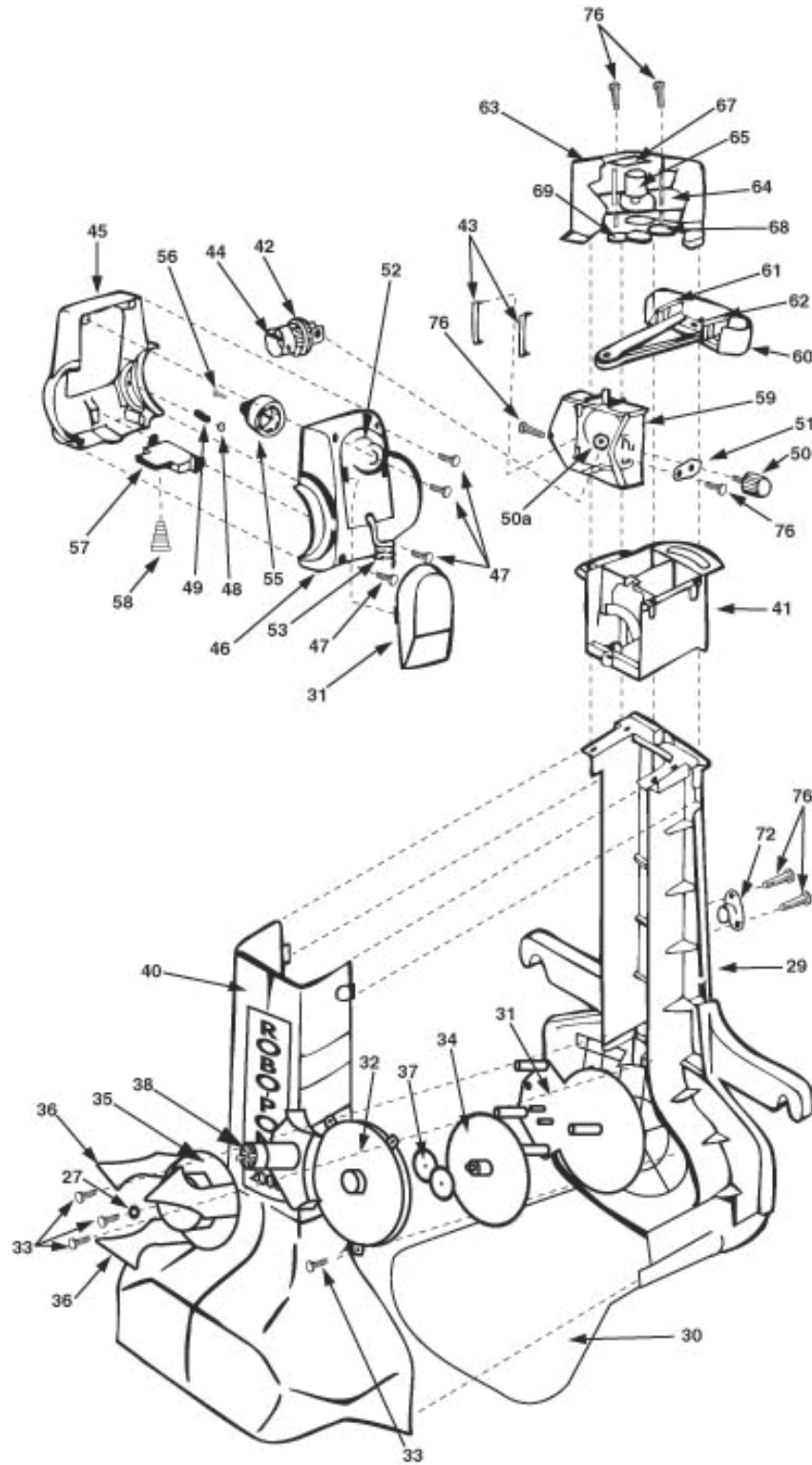
Figure N: Robot Body Assembly





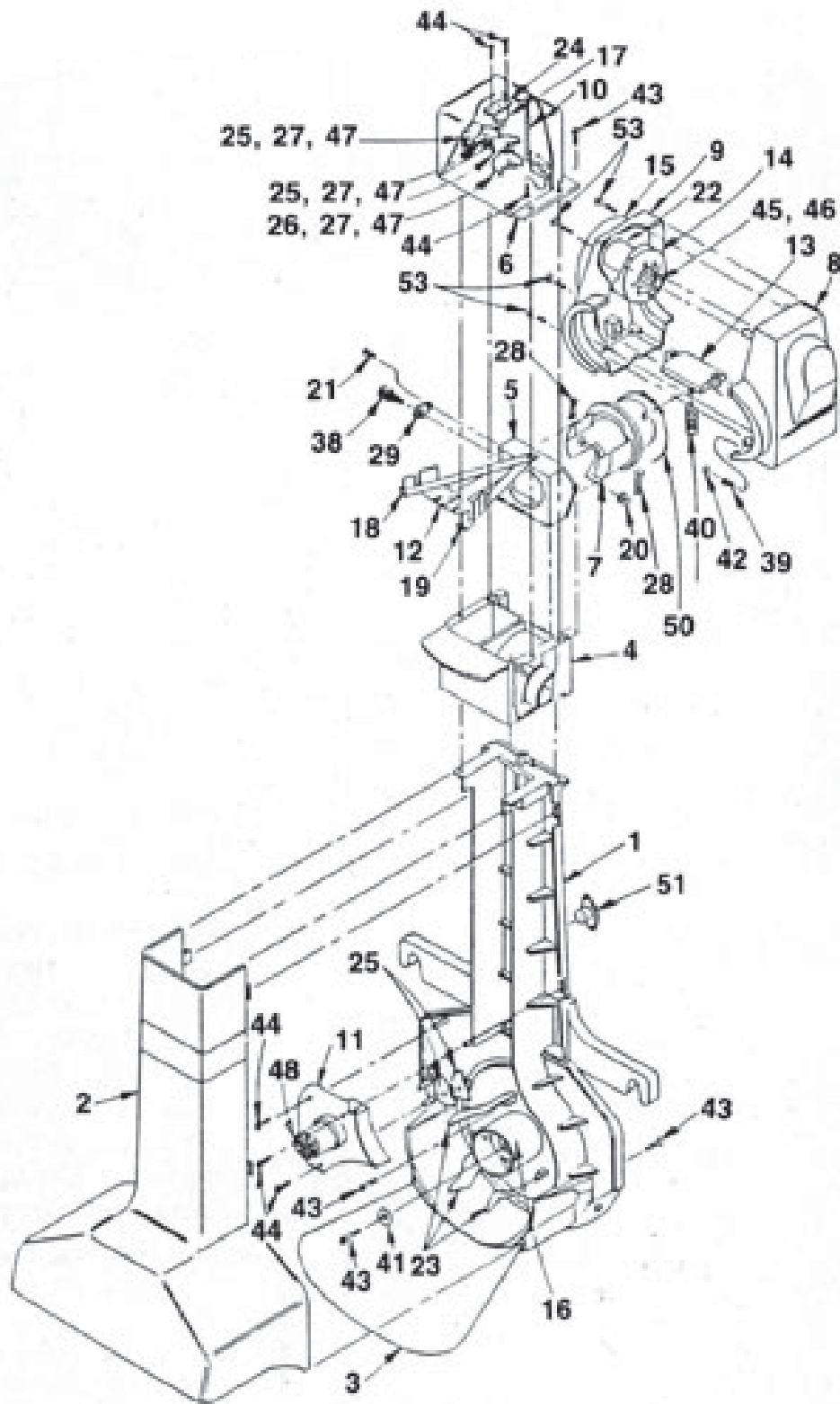
# Figure N: Robot Body Assembly

For model Robo-Pong 2000 (Manufactured after 1999)



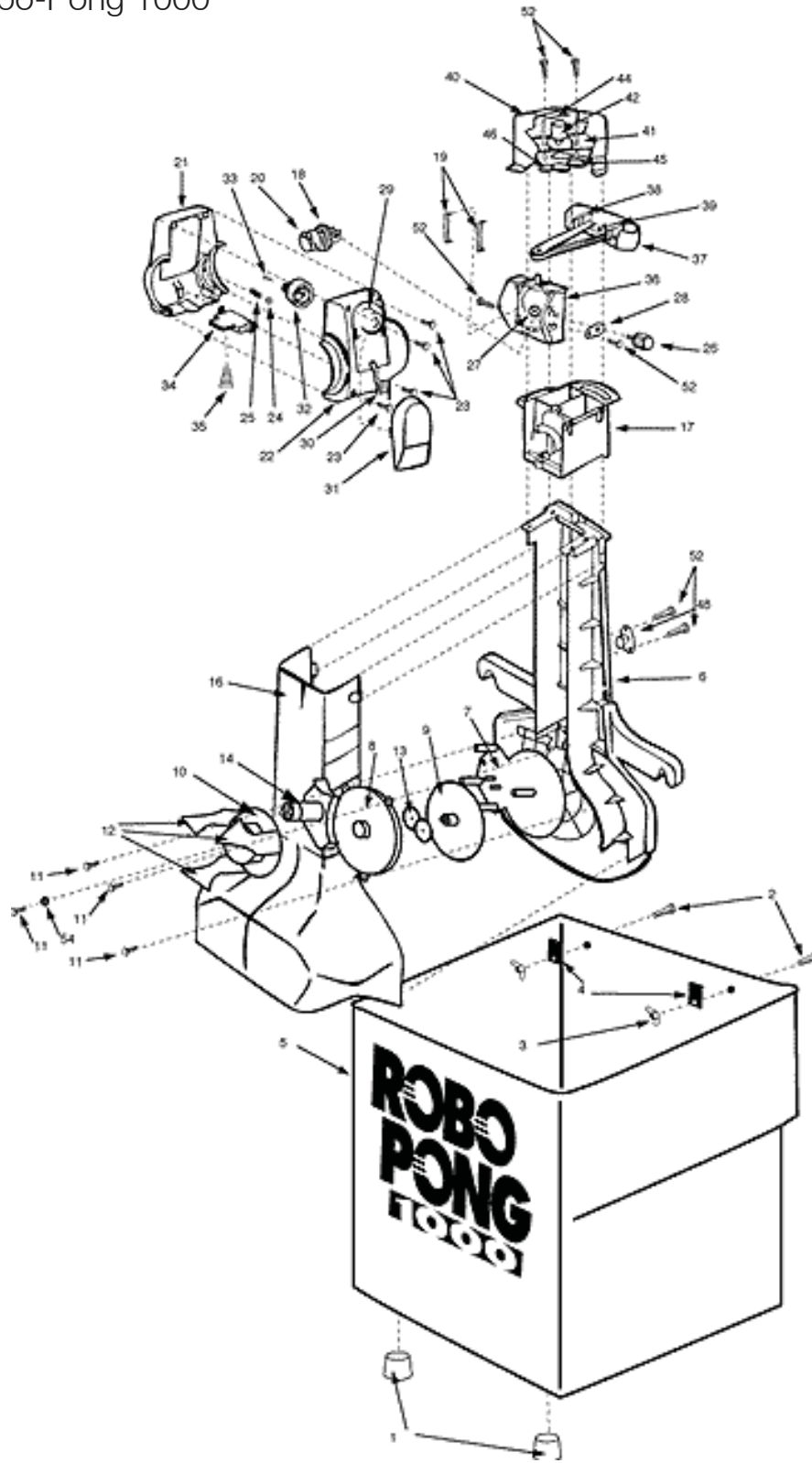
# Figure N: Robot Body Assembly

For model 1929:

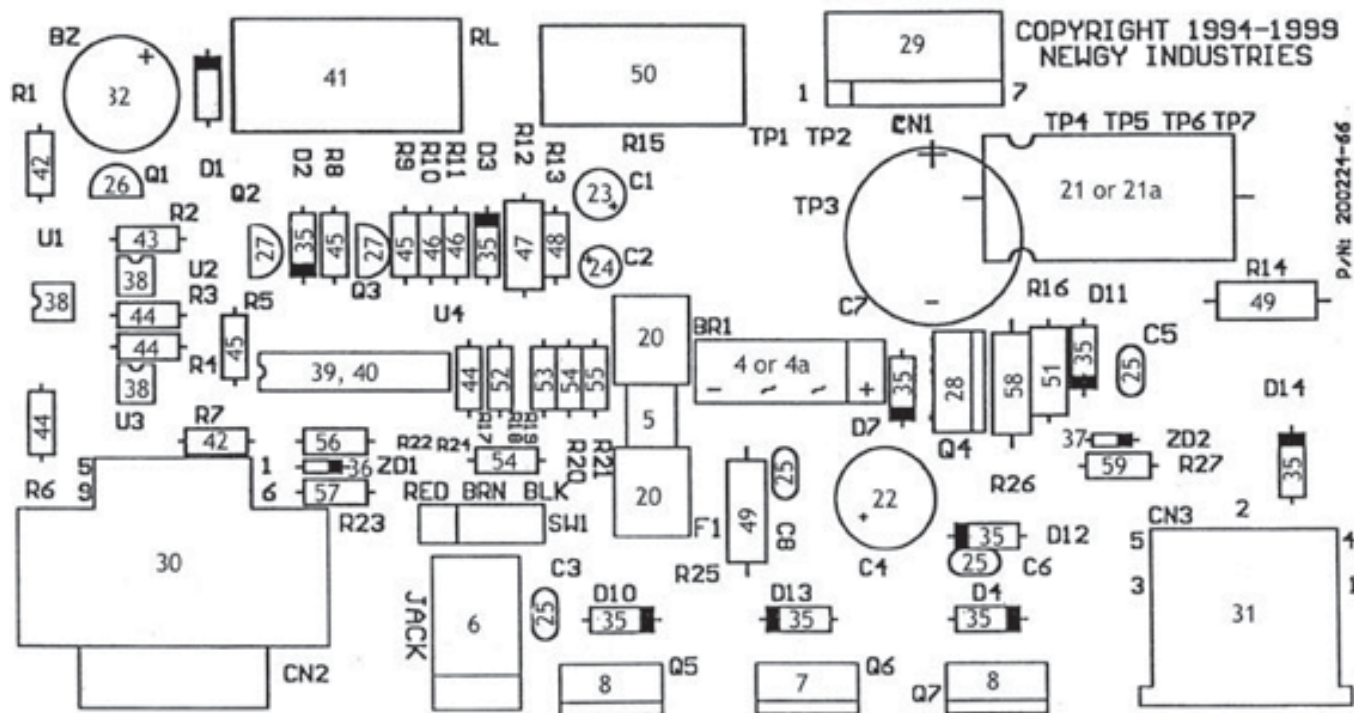


# Figure N: Robot Body Assembly

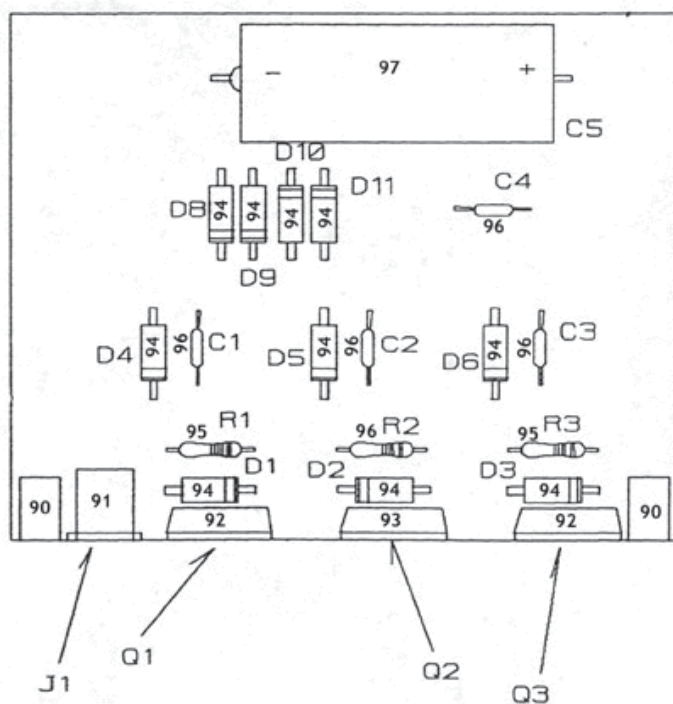
For model Robo-Pong 1000



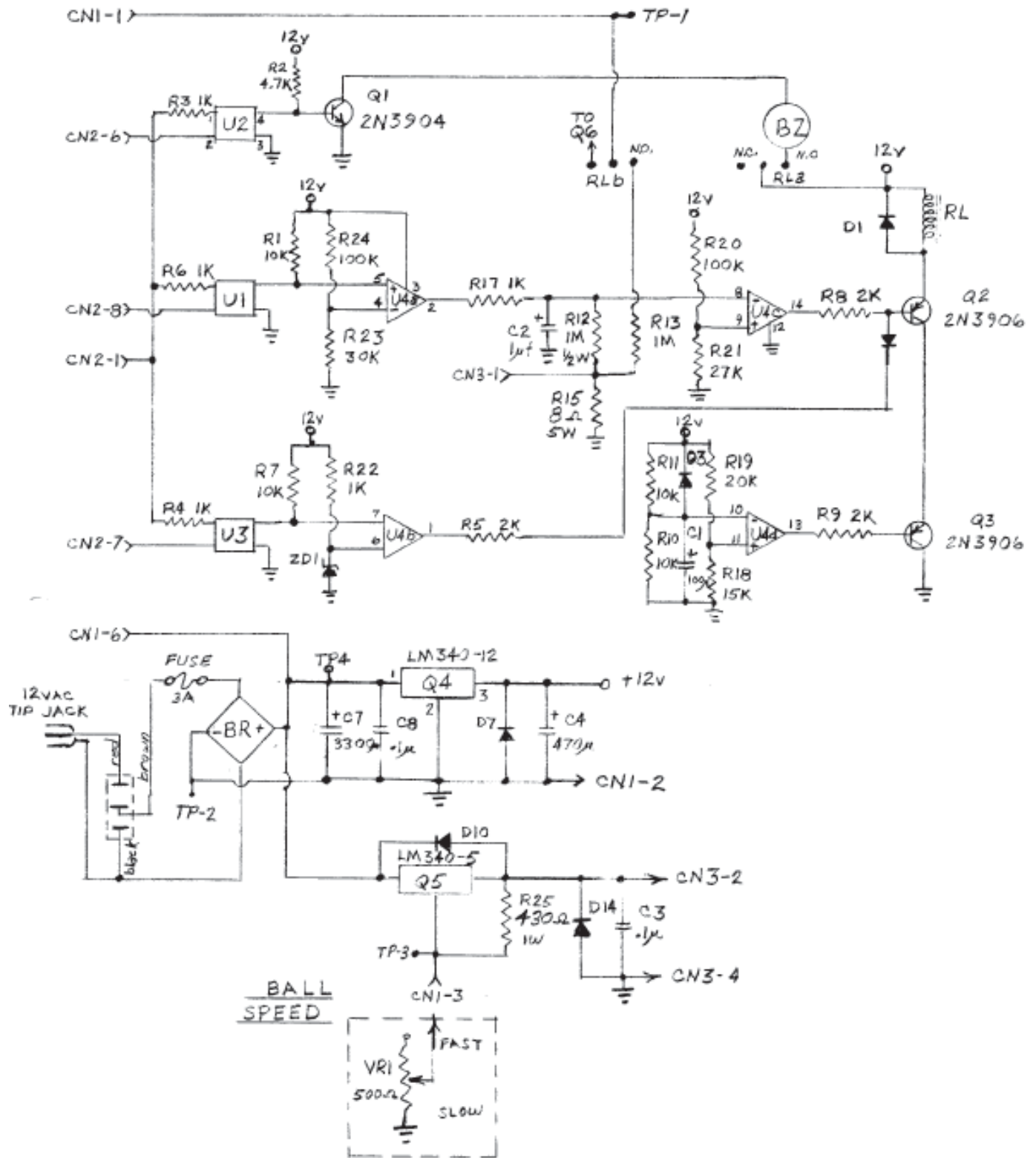
# Figure O: Component Locator for Control Box Circuit Board



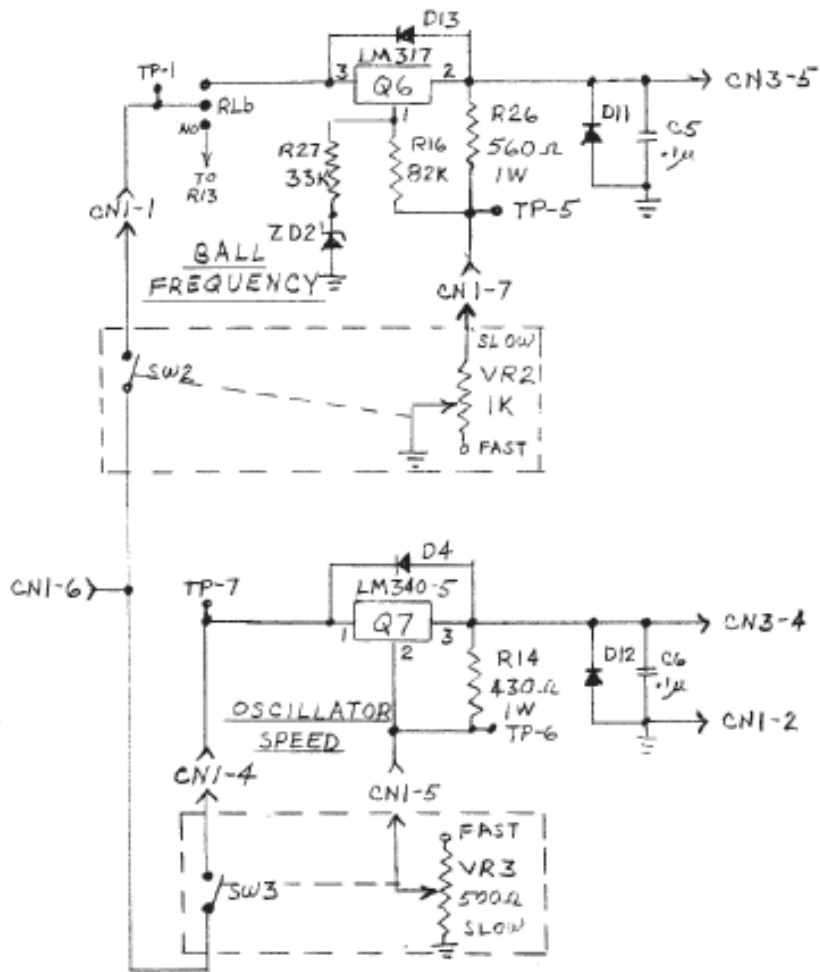
For model 1929:



# Figure P: Control Box Schematic Design



# Figure P: Control Box Schematic Design



CONTROL UNIT		
TEST PT.	FUNCTION	TYP. READING (DC VOLTS)
1	BALL FREQUENCY SW	OFF 0v ON 19v±1
2	GROUND OR COMMON	0v
3	BALL SPEED	SLOW 0v FAST 8.35v
4	RAW POWER SUPPLY	19v±1
5	BALL FREQUENCY	SLOW 0v FAST 7.9v
6	OSCILLATOR SPEED	SLOW 0v FAST 8.3v
7	OSCILLATOR SPEED SW	ON 0v ON 19±1v

CONDITIONS. 12v AC ADAPTER IN 120VAC.  
 POWER SWITCH ON (LIGHTED)  
 SENSORS DISCONNECTED  
 SCOREBOARD DISCONNECTED