







Welcome! If you have arrived at this book you have an interest in robots or robotics and you are looking for information. This book is the result of a researching, identifying, collecting and creating information and pictures for you.

Robot Companion is a fun, easy-to-understand, hands-on guide that will have you using your own robots in no time. The robot companion contains a diverse set of information and pictures of the robot to familiarizes a person with that robot.

This approach is used because so little information on the robots from the 1980s exists today and it will be helpful with the information instructions or manuals. They dance, tell jokes, and even clean your carpet! From the tiniest robot to gigantic machines, robotics is all around you.

This technology isn't just for science fiction anymore; it is real and more relevant than ever. With stunning visuals and energetic, impact designs, readers won't stop until they've learned everything to know about robots.

To the individuals that have designed and created these robots, and have put part of their lives in their work to successfully create these robots, the goal of this book is recognize these individuals and is dedicated to retain this information for history.

This book contains only part of the "First Wave of Robotics" and the research, time, frustrations, hope, knowledge and work that has gone into creating and building these robots pictures and information should be recognized.

The next generation of individuals and robots, will probably look different than addressed here. It is with this understanding that they will look different and present a different view.

The information and pictures of these robots is a recording of part of our history of robots and is intended to be part of that process. I hope that you copy and retain many or all of the pictures and information that is presented here and reuse them, as you need.

Robots are hear and now. In this day and age we tend to forget that robots are not a thing of the past, but are with us every day. As we paint or draw, look, sell, collect information, repair and use toy, educational, personal, industrial and commercial robots, I will still have people to ask me.

"What useful purpose do they serve? What can they do? Can they help me with my work? Are these just toys for children? Do they take my job away from me?"

My answer is: "They can do work and help us make a living and make our lives easier. It puts food on the table and a roof over our head. Robots help us do work, learn and entertain us, and is the proving grounds of our future advances in that technology, and it could be viewed as a experimental stage of our ideas."

I cannot say that robots of today are our products of tomorrow because they are our products of today.

More than half of the world uses robots, or make there living from it. Engineering Design, Manufacturing,
Delivery, Sales, Marketing, Management and Law are just a few of the areas affected.

Our Economy in this Century will be in very poor shape if it was not for robots.



Robot Companion is a fun, easy-to-understand, hands-on guide that will have you using your own robots in no time. The robots in this book include the "Omnibot Robot," the "Tomy Robots," and even a robot that carries a child on wheels!

You will learn how to find your robot, how to identify a robot by country through frequency allocation, where to buy parts, how to program your robot to perform tasks, and more. This book's companion website includes software program files, parts lists, and links to online parts suppliers.

The robot companion contains a devise set of information and pictures of the robot to familiarize a person with that robot. This approach is used because so little information on the robots from the 1980's exists today, and it will be helpful with the information instructions or manual.

They dance, tell jokes, and even clean your carpet! From the tiniest robot to gigantic factory machines, robotics is all around you. This technology isn't just for science fiction anymore; it's real and more relevant than ever. With stunning visuals and energetic, impact design, readers won't stop until they've learned everything there is to know about robotics.

You'll be led step-by-step through the book. Along the way, you'll learn about robotic systems that use the same principles you're learning to use on your robot, and you'll get a glimpse into the future of robots.

Here is an example proposed:

I dream When I was created or born in the 1980's, I was one of the few and select robots that had a purpose, to play, teach and entertain. I was young, didn't have a onboard computer, but didn't need one at the time. Besides, they were not readily available and need by me for my purpose. Who say's a robot must always have a computer.

I could move around in all directions, learn, teach, sleep, wake up and move around to pre-programmed functions, tell time, talk from others, talk on my own after pre recording, had my own limited language, carry things, sing and entertain. I stimulated people to dream of new ideas for science and technology when they were young. Young minds looked at me and taught of ways to improve and give me more functions, grew up and invented them, but put them on others.

I dreamed of growing up and doing more things, I waited and waited. Even though I traveled around the world, was international in all areas, (all countries knew of me or sold me) my brothers and sisters did become famous through the movies, and I was regulated to my everyday tasks.

So I waited and dreamed of growing up and doing greater things. It has been over twenty-three years and to a robot that is like being over a (100) hundred years old. I have been put in attics, garages, and basements thrown away into the junkyards and forgotten.

But I am persistent, I still live and still I dream. I will survive; I am tough, versatile and have hopes and dreams of my purpose for a future. I wait and I dream Tomy ® Omnibot ®

Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truly astounding what they were able to accomplish utilizing the resources at the time to manufacture and sell this product line.

The Omnibot had a cassette tape player built into the chest area of the robot, which slid out like a drawer to reveal the cassette and could record and playback sequences of commands, as well as regular audio recordings. The built in digital clock with timers and alarms allowed the playback of movement recordings at specified times. It could broadcast speech from the remote control handset through a speaker on the robot, and was shipped with a cardboard "home" base, which was suggested, to be taped to the floor and used as a reference point for programming. The Omnibot carried a specially made tray, which slotted into its claws, and could carry objects.





Omnibot ® 5402 / TR5000



Omnibot ® 5402 / TR5000 (Red)



Omnibot ® 5402 / TR5000 (White)



Omnibot ® 5402 / TR5000 (Silver)



Omnibot ® 5402 / TR5000 (Almond Boy)



Omnibot ® 5402 / TR5000 (Colgate)



Omnibot ® 5402 / TR5000 (Pepsi)



Omnibot ® 5402 / TR5000 (Red)



Omnibot ® 5402 / TR5000 (Gold)



Omnibot ® 5402 / TR5000 (Vintage)



Omnibot ® 5402 / TR5000 (XP-Robot)



Omnibot ® 5402 / TR5000 (XP-Robot)



Omnibot ® 5402 / TR5000 (XP- Signal)



Omnibot ® 5402 / TR5000 (Red)



Omnibot ® 5402 / TR5000 (Blue)



Omnibot ® 5402 / TR5000 (CD Robot)





Omnibot[®] 5402



Omnibot® 5402



Omnibot® 5402



Omnibot® 5402



Omnibot® 5402

Omnibot® 5402 / TR5000 By Tomy®







Omnibot MK- II ® 5402 / TR - 5500 Omnibot MK- II ® 5402 / TR - 5500 Omnibot MK- II ® 5402 / TR - 5500



Omnibot MK- II [®] 5402 / TR - 5500 by Tomy [®]







Omnibot MK- II [®] 5402 / TR - 5500 Omnibot MK- II [®] 5402 / TR - 5500 Omnibot MK- II [®] 5402 / TR - 5500 Omnibot MK- II [®] 5402 / TR - 5500



Omnibot MK- II ® 5402 / TR - 5500 by Tomy ®



Omnibot ® 5402 / TR - 5500



Omnibot ® 5402 / TR - 5500



Omnibot ® 5402 / TR - 5500



Omnibot ® 5402 / TR - 5500













Omnibot ® 5402

Omnibot [®] 5402 / TR - 5500 by Tomy [®]











Omnibot ® 5402

Omnibot [®] 5402 / TR - 5500 by Tomy [®]







Omnibot ® 5402 / TR - 5500

Omnibot ® 5402 / TR - 5500

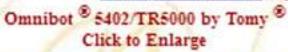
Omnibot [®] 5402 / TR - 5500 by Tomy [®]

Omnibot	Omnibot MKII	Omnibot MKII White	Omnibot MKII Red	Gold Omnibot	Red Omnibot	Silver Omnibot	Specials	Omnibot XP	Compare

Omnibot 5402 XP 8 By Tomy 8 Other Examples Links











Omnibot ® 5402/TR5000 Click to Enlarge



Omnibot [®] 5402/TR5000 Click to Enlarge



Omnibot [®] 5402/TR5000 Click to Enlarge



Omnibot 5402 - Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truely astounding what they were able to acomplish utilizing the resources at the time to manufacture and sell this product line.

The Omnibot had a cassette tape player built into the chest area of the robot, which slid out like a drawer to reveal the cassette and could record and playback sequences of commands, as well as regular audio recordings. The built in digital clock with timers and alarms allowed the playback of movement recordings at specified times. It was able to broadcast speech from the remote control handset through a speaker on the robot, and was shipped with a cardboard "home" base which was suggested to be taped to the floor and used as a reference point for programming. The Omnibot carried a specially made tray which slotted into its claws, and could carry objects.

Robot Specifications:

1. Tape Cassette Recorder Type: 2 track monaural, Tape Selection: normal bias only, Tape Speed: +/- 3%, Wow & Flutter: within 0.3%

- 2. Alarm Clock display: LCD accuracy: +/- 2 sec/day power: 1.5v AA battery duration: typical 5000 hours
- 3. Recharger (U.L. listed) coax plug (negative middle) in: 120 VAC out: 6 VDC, 400 ma
- 4. Main Battery Type: sealed lead acid, Output Rating: 6 V, 4.0 Ah, Physical Size: 2 1/4"L x 1 3/4"W x 4"H, Terminals / Connectors: lead wires with coaxial 'barrel-type' connector (negative center pole)
- General Operating time: Battery Life: 4 hours continuous at 5.5 V (normal), Battery Indicator: red light indicates when discharged to 5.77 volts,
 Operating Temperatures: 41 Degrees F~104 Degrees F (5 Degrees C~40 Degrees C)
- 6. Microphone type: dynamic, 300 600
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. External outlets: Speaker: 8 ohms
- 9. Bulbs for eye-lights 2.8v, 200ma use not more than 3v 250ma 10. Remote Control 4 * 1.5v (AA)

Accessories: Controller, Detachable tray 2.2 lbs maximum weight allowance, Demonstration cassette tape, Battery charger, Home Base, Tuner









Omnibot MK-II 8 TR5503 (White) by Tomy 8

Omnibot MK II 5402 - Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truely astounding what they, and other companies, were able to acomplish utilizing the resources at the time to manufacture and sell this product line.

The Omnibot MK II had a cassette tape player built into the chest area of the robot, which slid out like a drawer to reveal the cassette and could record and playback sequences of commands, as well as regular audio recordings. The built in digital clock with timers and alarms allowed the playback of movement recordings at specified times. It was able to broadcast speech from the remote control handset through a speaker on the robot, and was shipped with a cardboard "home" base which was suggested to be taped to the floor and used as a reference point for programming. The Omnibot carried a specially made tray which slotted into its claws, and could carry objects.

Many hobbyists have turned to hacking, tweaking and improving their Omnibots. Commonly added features are IR Sensors, video cameras, speech recognition chips, stronger motors, microcontrollers, sonars and other advanced enhancements that would not have been possible in the 80s.

Robot Specifications:

- 1. Tape Cassette Recorder Type: 2 track monaural, Tape Selection: normal bias only, Tape Speed: +/- 3%, Wow & Flutter: within 0.3%
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- 3. Recharger (U.L. listed) coax plug (negative middle) in: 120 VAC out: 6 VDC, 400 ma
- 4. Main Battery Type: sealed lead acid, Output Rating: 6 V, 4.0 Ah, Physical Size: 2 1/4"L x 1 3/4"W x 4"H, Terminals / Connectors: lead wires with coaxial barrel-type connector (negative center pole)
- 5. General Operating time: Battery Life: 4 hours continuous at 5.5 V (normal), Battery Indicator; red light indicates when discharged to 5.77 volts, Operating Temperatures: 41 Degrees F~104 Degrees F (5 Degrees C~40 Degrees C)
- 6. Microphone type: dynamic, 300 600
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. External outlets: Speaker: 8 ohms
- 9. Bulbs for eye-lights 2.8v, 200ma use not more than 3v 250ma 10. Remote Control 4 * 1.5v (AA)

Accessories

Controller

Detachable tray 2.2 lbs maximum weight allowance

Demonstration cassette tape

Battery charger

Home Base

Tuner









Omnibot MK II - TR5500



Omnibot MK II - TR5500



Omnibot MK II - TR5500



Omnibot MK II - TR5500



MY Thanks to omnibotfreak38 "A Omnibot/Fish Collector" for the Red Omnibot MK II Movie.



Omnibot MK II

I dream..... When I was created or born in the 1980's, I was one of the few and select robots that had a purpose, to play, teach and entertain. I was young, didn't have a onboard computer, but didn't need one at the time. Besides, they were not readily available and need by me for my purpose. Who say's a robot must always have a computer.

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But I am persistent, I still live and still I dream. I will survive; I am tough, versatile and have hopes and dreams of my purpose for a future. I wait and I dream

Omnibot 8 5402









Omnibot MK II - TR5503



Omnibot MK II - TR5503



Omnibot MK II - TR5503



Omnibot MK II - TR5503



MY Thanks to the omnibotfreak38 "A Omnibot/Fish Collector" for the White Omnibot MK II Movie.



Omnibot MK II

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Omnibot 8 5402





Omnibot 5402 X - Front



Omnibot 5402 X - Front



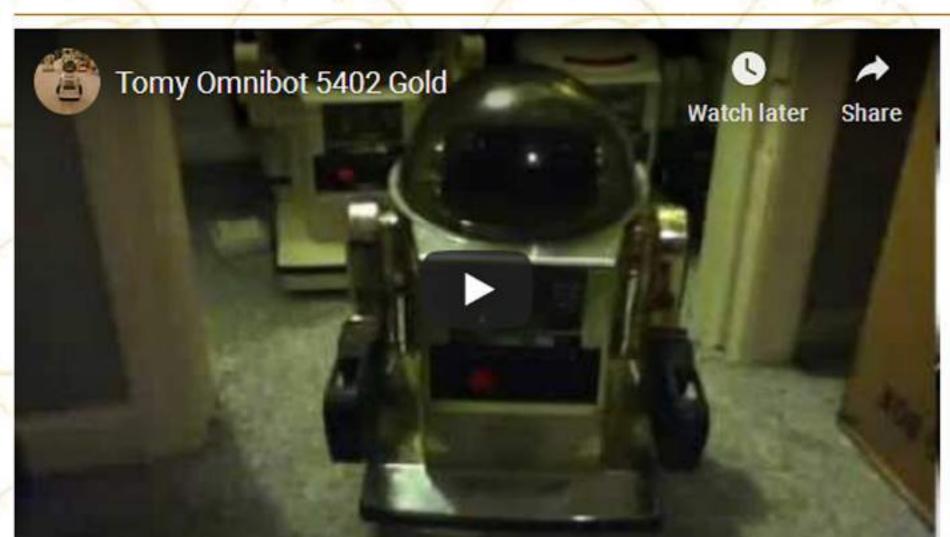
Omnibot 5402 X - Back



Omnibot 5402 X - Side



Omnibot 5402 X - Side



Gold Omnibot 5402 8 by Tomy 8

Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truely astounding what they, and other companies, were able to acomplish utilizing the resources at the time to manufacture and sell this product line.

The Omnibot had a cassette tape player built into the chest area of the robot, which slid out like a drawer to reveal the cassette and could record and playback sequences of commands, as well as regular audio recordings.

The built in digital clock with timers and alarms allowed the playback of movement recordings at specified times.

It was able to broadcast speech from the remote control handset through a speaker on the robot, and was shipped with a cardboard "home" base which was suggested to be taped to the floor and used as a reference point for programming. The Omnibot carried a specially made tray which slotted into its claws, and could carry objects.

Robot Specifications:

- 1. Tape Cassette Recorder Type: 2 track monaural, Tape Selection: normal bias only, Tape Speed: +/- 3%, Wow & Flutter: within 0.3%
- 2. Alarm Clock display: LCD accuracy: +/- 2 sec/day power: 1.5v AA battery duration: typical 5000 hours
- 3. Recharger (U.L. listed) coax plug (negative middle) in: 120 VAC out: 6 VDC, 400 ma
- 4. Main Battery Type: sealed lead acid, Output Rating: 6 V, 4.0 Ah, Physical Size: 2 1/4"L x 1 3/4"W x 4"H, Terminals / Connectors: lead wires with coaxial barrel-type' connector (negative center pole)
- 5. General Operating time: Battery Life: 4 hours continuous at 5.5 V (normal), Battery Indicator: red light indicates when discharged to 5.77 volts, Operating Temperatures: 41 Degrees F~104 Degrees F (5 Degrees C~40 Degrees C)
- 6. Microphone type: dynamic, 300 600
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. External outlets: Speaker: 8 ohms
- 9. Bulbs for eye-lights 2.8v, 200ma use not more than 3v 250ma 10. Remote Control 4 * 1.5v (AA)

Accessories

Controller

Detachable tray 2.2 lbs maximum weight allowance

Demonstration cassette tape

Battery charger

Home Base

Tuner









Red Robot 9 - Angle





Red Robot . Right Side



Red Robot 8 - Left Side

Red Omnibot 5402 8 - Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truely astounding what they, and other companies, were able to acomplish utilizing the resources at the time to manufacture and sell this product line.

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- 2. Alarm Clock display: LCD accuracy: +/- 2 sec/day power: 1.5v AA battery duration: typical 5000 hours
- 3. Recharger (U.L. listed) coax plug (negative middle) in: 120 VAC out: 6 VDC, 400 ma
- 4. Main Battery Type: sealed lead acid, Output Rating: 6 V, 4.0 Ah, Physical Size: 2 1/4"L x 1 3/4"W x 4"H, Terminals / Connectors: lead wires with coaxial barrel-type connector (negative center pole)
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- 6. Microphone type: dynamic, 300 600
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. External outlets: Speaker: 8 ohms
- 9. Bulbs for eye-lights 2.8v, 200ma use not more than 3v 250ma 10. Remote Control 4 * 1.5v (AA)

Accessories

Controller

Detachable tray 2.2 lbs maximum weight allowance

Demonstration cassette tape

Battery charger

Home Base

Tuner









Omnibot 5402 Silver Robot



Omnibot 5402 Silver Robot



Omnibot 5402 Silver Robot



Omnibot 5402 Silver Robot

Silver Omnibot 5402 - Tomy has created toy robots throughout the years and in the 80's created a line of small personal robots. It is truely astounding what they, and other companies, were able to acomplish utilizing the resources at the time to manufacture and sell this product line.

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Robot Specifications:

- 1. Tape Cassette Recorder Type: 2 track monaural, Tape Selection: normal bias only, Tape Speed: +/- 3%, Wow & Flutter: within 0.3%
- 2. Alarm Clock display: LCD accuracy: +/- 2 sec/day power: 1.5v AA battery duration: typical 5000 hours
- 3. Recharger (U.L. listed) coax plug (negative middle) in: 120 VAC out: 6 VDC, 400 ma
- 4. Main Battery Type: sealed lead acid, Output Rating: 6 V, 4.0 Ah, Physical Size: 2 1/4"L x 1 3/4"W x 4"H, Terminals / Connectors: lead wires with coaxial barrel-type' connector (negative center pole)
- 5. General Operating time: Battery Life: 4 hours continuous at 5.5 V (normal), Battery Indicator: red light indicates when discharged to 5.77 volts, Operating Temperatures: 41 Degrees F~104 Degrees F (5 Degrees C~40 Degrees C)
- 6. Microphone type: dynamic, 300 600
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. External outlets: Speaker: 8 ohms
- 9. Bulbs for eye-lights 2.8v, 200ma use not more than 3v 250ma 10. Remote Control 4 * 1.5v (AA)

Accessories

Controller ; Detachable tray 2.2 lbs maximum weight allowance ; Demonstration cassette tape

Battery charger ; Home Base ; Tuner





Omnibot 5402 (TOMY)



Omnibot 5402 (No Name)



Omnibot MK II - 5402 (TOMY)



Robie Sr (Radio Shack)



Hearoid & OOM (TOMY)



Hearoid & OOM (TTC)



Hearoid (TTC)



Omnibot 2000 (TOMY)



Original Omnibot - 2.76 X 1.85 X 4.15 Omnibot 5402 - 6v 4.0 ah Sealed Lead Acid Battery



Original Omnibot - 2.76 X 1.85 X 4.15 yuasa np-4-6w 6v 4.0 ah Sealed Lead Acid Battery



Replacement: B.B. Battery BP5-6 Sealed Lead Acid Battery 2.76" x 1.85" x 4.10"



Replacement: CSB GP 645 6V 4.5Ah Sealed Lead Acid Battery



Replacement: WERKER WKA6-5F 6V 5Ah AGM Sealed Lead Acid Battery



Omnibot 2000 input 240 V 50 Mh 6VDC 400ma



Omnibot Tomy 2EX-5441 6VDC 300ma



Hearoid / OOM TAMRADIO 25A-3532 400ma



Omnibot MK II TAMRADIO 29A-4135 400ma



Robie Sr. TC-604U 6VDC 600ma



Omnibot Replacements
Radio Shack Battery Charger
60-2398 6VDC 600ma

* Battery Chargers will range from 300ma to 600ma for lead acid batteries. See battery specifications and their recommendations.

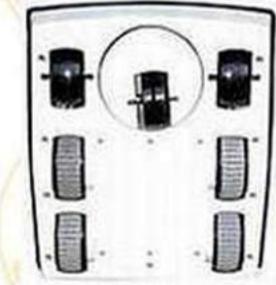




Omnibot 5402 - Later Version



Omnibot 5402- Early Version



Omnibot MK II - 5402



Robie Sr



Hearoid & OOM



Omnibot 2000



Omnibot MK II 5402



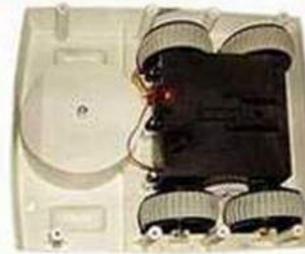
Omnibot MK II 5402

* All wheels are interchangeable except for the Omnibot 2000



Robie Sr

* All gearboxes are interchangeable except for the Omnibot 2000



Omnibot 5402



Omnibot OOM Hearoid



Omnibot 2000



(Old) Omnibot 5402



Omnibot \$402



OOM Hearoid

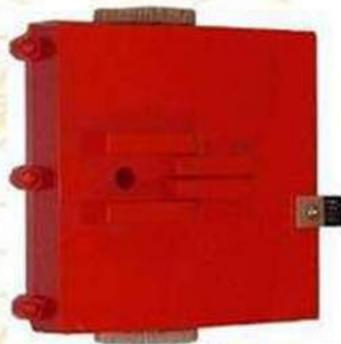


Robie Sr

* All gearboxes are interchangeable except for the Omnibot 2000



Omnibot 2000



Omnibot 2000

* All gearboxes are interchangeable except for the Omnibot 2000





Omnibot 5402 - English



Omnibot 5402 - English



Omnibot 5402 - English



Omnibot 5402 - English



Omnibot 5402 - English



Omnibot 5402 - English/French



Omnibot 5402 - English/French



Omnibot 5402 - Japan



Omnibot 5402 - Japan



Omnibot 5402 - Japan



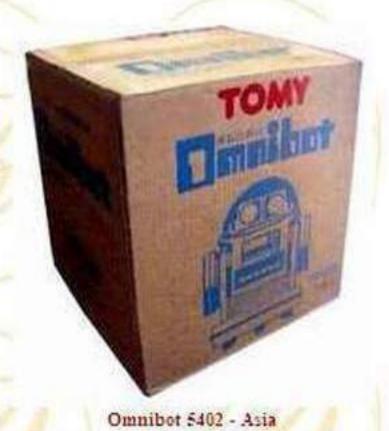
Omnibot 5402 - Japan



Omnibot 5402 - Japan











Omnibot 5402 - Insert = 1

Omnibot 5402 - Insert # 2



Omnibot 5402 - English



Omnibot 5402 - Asia



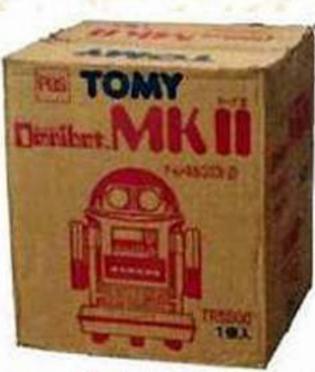
Omnibot 5402 - English French - Canada



Omnibot 5402 TR5000 8



Omnibot MK II - Box



Omnibot MK II - Box



Omnibot MK II - Box



Omnibot MK II - Box

* This is Omnibot Robot Family of Boxes.



Omnibot Microphone TR 5030



Omnibot Microphone TR 5030



Omnibot Microphone TR 5030





Robie Sr. by Radio Shack Tray





Robie Sr. by Radio Shack Cassette Tape & Tuner



Omnibot 5402 By Tomy Tray



Omnibot 5402 Cassette Tape & Tuner



Omnibot MK II - Tray



Omnibot MK II ® Cassette Tape & Tuner



Omnibot 5402 Button Click to Enlarge



* This is comparison for Omnibot 5402

* This is comparison for Omnibot 5402



Omnibot 5402, Robie Sr



Hearoid / OOM



All Other Omnibots

Tomy has created many toy robots throughout the years and in the 80's created a line of small Personal robots. The Omnibot programming is done by recording the movement commands to a regular cassette tape which can be played back at certain times by using the built-in clock.. The specs below are for the Omnibot.

- 1. Tape recorder two tracks, mono tape type: normal tape speed: +/- 0.3% deviation: less then 0.3
- 2. Alarm clock display: LCD accuracy: +/- 3 sec/day power: 1.5v AA battery duration: typical 5000 hours
- 3. Recharger coax plug (negative middle) in: 120vac out: 6vdc, 300 ma
- 4. Main Battery type: closed, lead gel cell power: 6v, 4.0ah
- 5. General Operating time: 4 hours Load display: Red light, shows discharge at 5.7v operating temp: 5 deg 40 deg celsius
- 6. Microphone type: dynamic, 300 600 ohms
- 7. Operating R/C frequency: The Remote came in 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL)
- 8. Bulbs for eye lights 2.8v, 200 ma use not more than 3v 250 ma 10. Remote Control 4 * 1.5v (AA)

Remote Features Omnibot * 5402: The Master Control Unit (MCU) has an antenna with its power switch & indicator. It has a button to push in to talk through its microphone to the robot in which the robot will respond with eyes flickering. It has all the buttons to control the robot as follows: Left side buttons for tape start/stop, omnibot sounds, Microphone on/off key. Right side of remote controls movement of robot to go forward/reverse, left/right turn and stop.

The Omnibot ® series robots was manufactured by Tomy ®, TTC ® and Radio Shack ® in the 1980s. The name then came to apply to the successful line of robots manufactured by the Tomy company. The initial Omnibot was announced with expectations of restoring popular interest in robots and with the success of the Omnibots, the Omnibot range quickly expanded. The original Omnibot became the cover photo for the 1980s book, "The World of Robots" and recently the Omnibot 2000 graced the cover of "Toy Robots from Japan" by Alan Bunkum.

The Omnibot [®], MK II, Hearoid [®], OOM [®], Robie [®] Sr and the Omnibot [®] 2000 had a cassette tape player built into the chest area of the robot, which slid out like a drawer to reveal the cassette and could record and playback sequences of commands, as well as regular audio recordings. The built in digital clock with timers and alarms allowed the playback of movement recordings at specified times. All the robots were able to broadcast speech from the remote control handset through a speaker on the robot. The Omnibot and Robie Sr were similar in operation while the Hearoid, OOM, MK II and the Omnibot 2000 had other functions that specialized them. All could carry objects in one way or another.

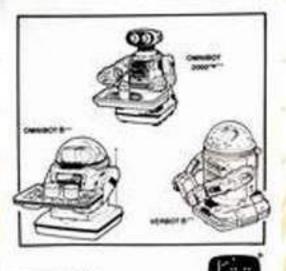


OMNIBOT ACESSORIES GROUP



Robo Link Click to Enlarge





Robo Link

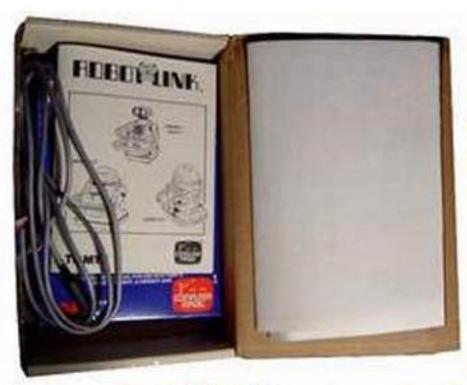
TOMY."



Robo Link



Robo Link



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Robo Link

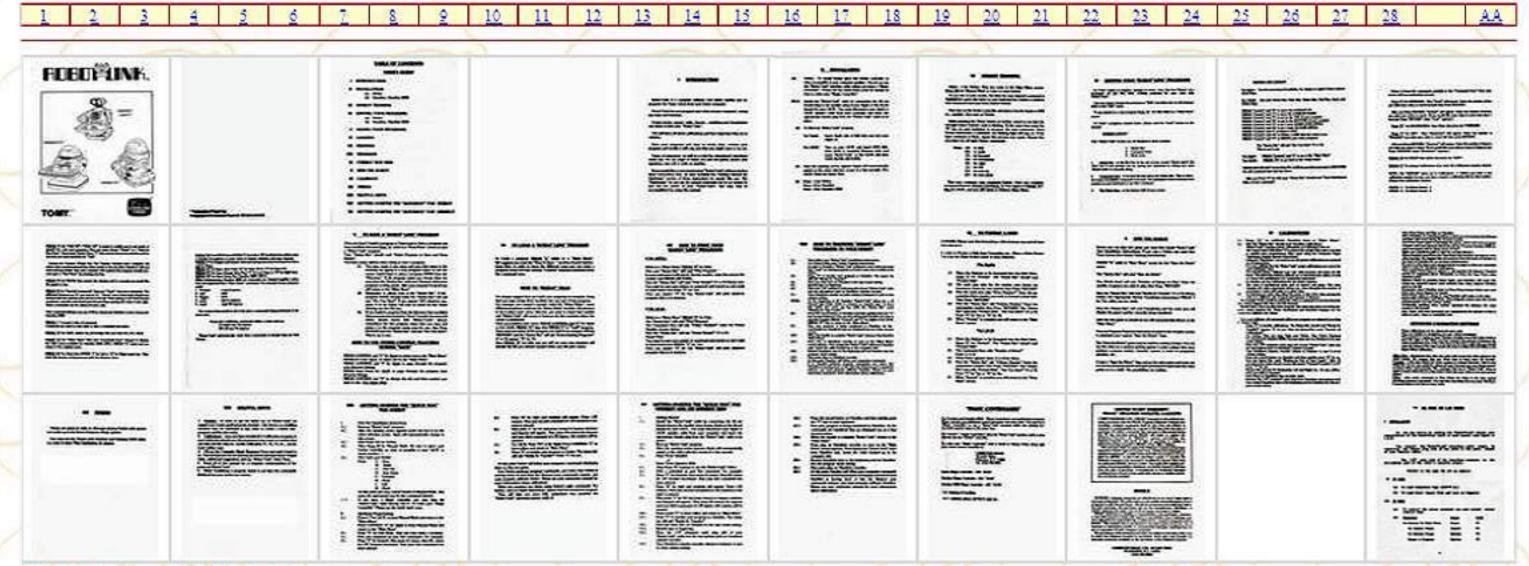


Robo Link

Robo Link

Robo Link for Omnibot 2000, Omnibot, and Hearoid!

Robo Link TM by Computer Magic for Omnibot 2000, Omnibot, and Hearoid! Robot Link is a computer software tool which enables you to program the Tomy robots from your home computer. It lets you program your robot on your computer saving you time and batteries. Create stories, games, tasks, dances anything your imagination can think of with your Robot Link. Years of enjoyment, as well as a truly fun educational experience await you.



Robo Link Manual # - Original





INFRARED SENSOR - No. 5412



INFRARED SENSOR - No. 5412



INFRARED SENSOR - No. 5412



INFRARED SENSOR - No. 5412

INFRARED SENSOR - No. 5412

Ideas for your new INFRARED SENSOR accessory: Your robot can show off at yard sales, advertise specials, and carry goods on his tray: Stuck in a dark corner? Don't panic. Let your robot buddy lead the way as he steers you out of the darkness with his INFRARED SENSOR!



TRACER TAPE - No. 5413



TRACER TAPE - No. 5413



TRACER TAPE - No. 5413



TRACER TAPE - No. 5413

TRACER TAPE - No. 5413

Ideas for your new TRACER TAPE accessory:

Your robot can deliver memos and secret messages and personal notes. Just plot a course to deliver routine correspondence with a tape.



PHOTO SENSOR - No. 5414



PHOTO SENSOR - No. 5414



PHOTO SENSOR - No. 5414



PHOTO SENSOR - No. 5414

PHOTO SENSOR - No. 5414

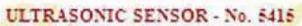
Ideas for your new PHOTO SENSOR accessory:

Even in the dark, your Securitroid will be ready to catch a thief!

Have your robot come to life just by flipping off or on a light. Your mechanical pal makes a great alarm when the sun rises!









ULTRASONIC SENSOR - No. 5415



ULTRASONIC SENSOR - No. 5415



ULTRASONIC SENSOR - No. 5415

ULTRASONIC SENSOR - No. 5415

Ideas for your new ULTRASONIC SENSOR accessory:

Amaze your friends! Hold the transmitter out of sight and your mechanical man will follow you everywhere... like magic!

Your robot can show-off at yard sales, advertises specials, and carry goods on his tray.

Let your robot race with your baby brother or sister! See who's the fastest.



SECURITY DETECTOR - No.



SECURITY DETECTOR - No.



SECURITY DETECTOR - No.







SECURITY DETECTOR - No.

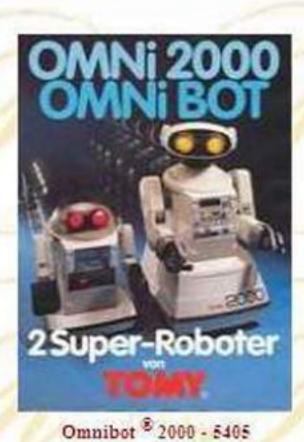
SECURITY DETECTOR - No.

Even in the dark, your Securitroid will be ready to catch a thief!









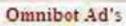
Die große Roboter-Familie Tomy Omnibot Family



WHAT WAS ONCE SCIENCE FICTION IS NOW SCIENCE FACT

Tomy Omnibot Family







Omnibot 5402



Colgate Omnibot 5402



Omnibot MK II Omnibot 5402/TR5000



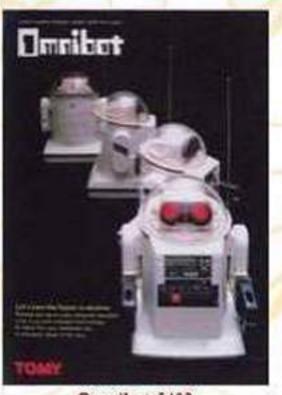
Omnibot MK II



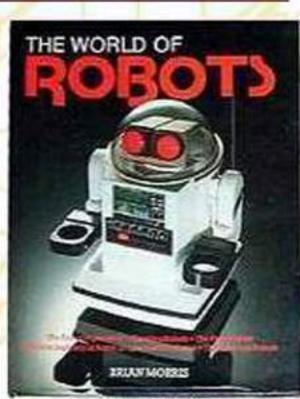
Omnibet MK II



Omnibot 5402



Omnibot 5402



Omnibot 5402



Omnibot MK II



Omnibot MK II

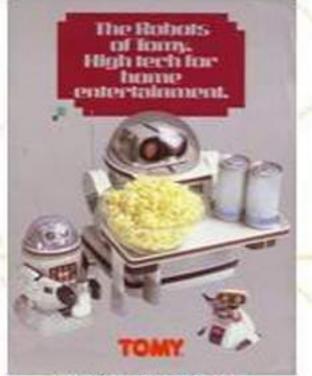


Omnibot Fan Book



Omnibot Advertisement





Omnibot Advertisement



Tomy Advertisement



Tomy Advertisement



Tomy Advertisement



Tomy Advertisement



Omnibot 5402





Tomy Omnibot Family



Tomy 8 Omnibot Robot

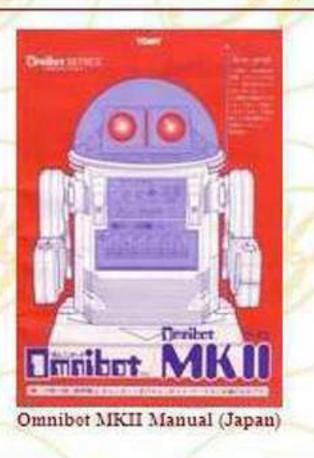






INSTRUCTION MANUAL

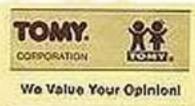






Omnibot Manual (Japan)





As Forty was are continuely activing to meet the reside and interests of the people and buy our new and pames.

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The Back plu for your help is the enguing what and tops that you have to well pick you have happy they have at the and engineers.

Any questional? Please qui turbine Cartionia priy 1 000 821 6498 Dubide Catherine 1 000 821 6498

Tomy & Omnibot Robot



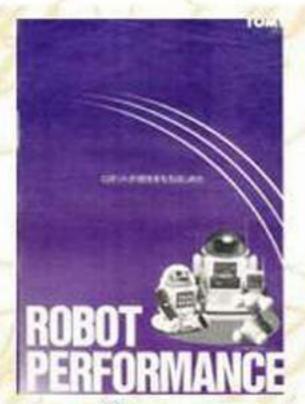
Tomy 8 Omnibot Robot



Tomy & Omnibot Robot



Tomy @ Omnibot Robot



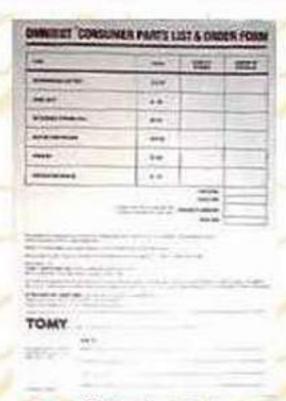
Tomy 8 Omnibot Robot



Tomy Dmnibot Robot



Tomy @ Omnibot Robot



Tomy & Omnibot Robot



Tomy & Omnibot Robot



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Tomy & Omnibot Robot



Tomy 8 Omnibot Robot



Tomy Dmnibot Robot



Tomy Dmnibot Robot

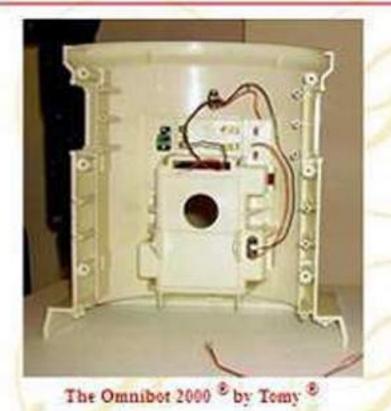


Tomy & Omnibot Robot

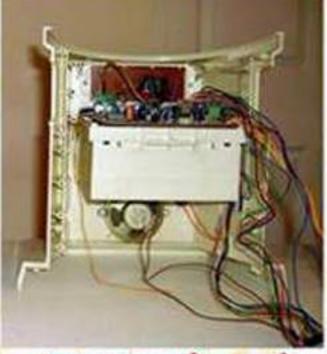


Tomy & Omnibot Robot





Compare - The Omnibot 2000 8 by Tomy 8



The Omnibot 2000 8 by Tomy 8



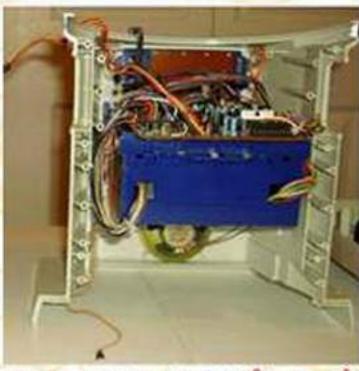
The Omnibot 2000 ⁸ by Tomy ⁸



The Omnibot 2000 ® by Tomy ®



The Omnibot Hearoid / OOM 8 by Tomy 8



The Omnibot Hearoid / OOM & by Tomy

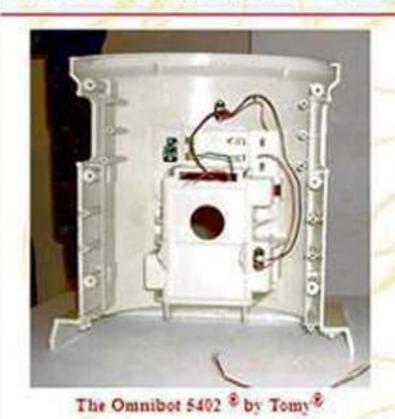


The Omnibot Hearoid / OOM 8 by Tomy 8

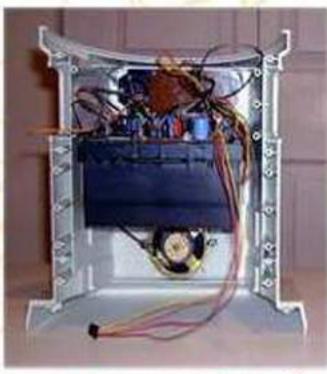


The Omnibot Hearoid / OOM 8 by Tomy 8

Compare - The Omnibot Hearoid & by Tomy &



Compare - The Omnibot 5402 8 by Tomy 8



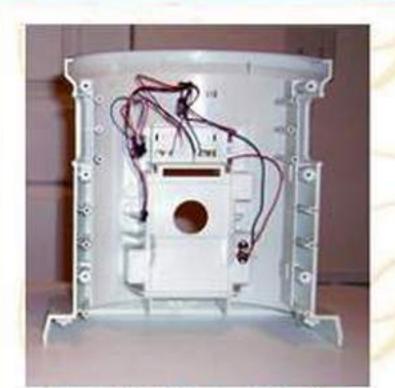
The Omnibot 5402 ® by Tomy®



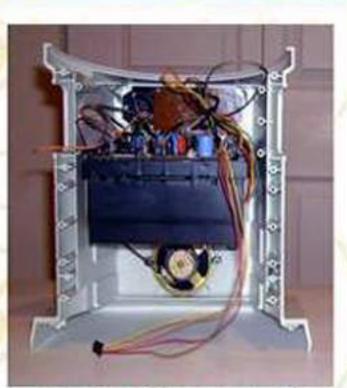
The Omnibot 5402 by Tomy



The Omnibot 5402 by Tomy



The Robie Sr. 8 by Radio Shack 8



The Robie Sr. 8 by Radio Shack 8



The Robie Sr. 8 by Radio Shack 8



The Robie Sr. 8 by Radio Shack 8

Compare - The Robie Sr. 8 by Radio Shack 8





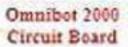




Omnibot 5402

* These are examples of the Circuit Boards in the Omnibot Famaly of Robots



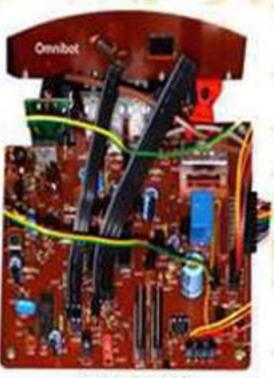




Hearoid / OOM Circuit Board



Robie Sr. Circuit Board



Omnibot 5402 Circuit Board



Omnibot 5402 (Old) Circuit Board

* These are examples of the Circuit Boards in the Omnibot Famaly of Robots



Omnibot 5402



Omnibot MK II



Robie Sr.

* All controllers are not interchangeable but these three are simular and could be modified. * Frequency



Omnibot 5402



Omnibot 5402



Omnibot 5402

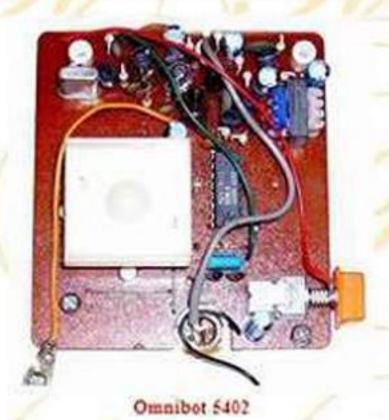


Omnibot 5402

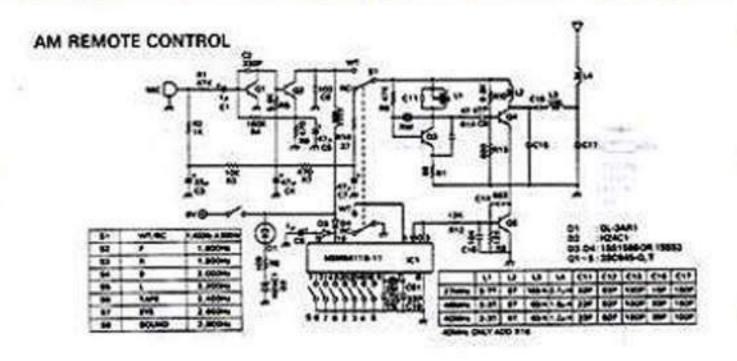


Omnibot 5402









Omnibot 5402

* All controllers are not interchangeable but these three are simular and could be modified. * Frequency

REPAIR INFORMATION: Omnibot Repairs:

- The Omnibot® Family Batteries and Chargers
- The Omnibot® Family Battery Contact Refurbushed & Making Replacement
- The Omnibot® Family Battery Contact Replacement Procedure
- The Omnibot® Family Programming Tape Set-up
- The Omnibot® Family Circut Boards Pictures
- The Omnibot® Family Repair Pictures
- The Omnibot [®] Family Accessories Information
- Omnibot® 2000 Tomy® Robot ; Dissasembly and Assembly
- Omnibot[®] 2000 Tomy[®] Robot Tray Dissasembly and Assembly
- Omnibot[®] 2000 Tomy[®] Robot; Adding A Motorized Left Arm and Controls
- Omnibot® 2000 Tomy® Robot Arm Pictures
- . Omnibot 2000 Tomy Robot Head, Door & Accessories Panel, External Jacks Panel Pictures
- . Omnibot 2000 Tomy Robot Drive Train Pictures
- Omnibot® 2000 Tomy® Robot Questions & Answers
- Omnibot[®] 2000 Tomy[®] Robot Before and After Pictures
- Hearoid® TTC® Robot The Dissasembly and Assembly
- Hearoid or OOM® by Tomy® Home Base Replacement File in (.JPG) format
- Robie Sr.® by Radio Shack® Robot The Dissassembly and Assembly
- . Robie Sr. & The Omnibot 5402 Service Manual For Troubleshooting Robots [Manual & Schematics]
- . The Omnibot 54028 Service Manual For Troubleshooting Robots [Manual]
- Omnibot \$5402 Robot by Tomy Dissassembly and Assembly
- · Omnibot \$5402 Robot by Tomy Home Base Replacement File in (.JPG) format
- Omnibot[®] 5402 Robot by Tomy[®] Controller Circut Boards
- . Omnibot \$5402 by Tomy . Robie Sr. by Radio Shack and Hearoid by TTC Robot Drive Train
- Omnibot[®]5402 by Tomy[®], Robie Sr.[®] by Radio Shack[®] and Hearoid by TTC[®] Robot Robot Arms
- Omnibot \$5402 by Tomy . Robie Sr. by Radio Shack Circuit Boards Schematics
- . Omni Jr. 8 by Tomy8, Robie Jr. 8 by Radio Shack 8 Repair Pictures
- . Omni Jr. Sor Omnibot Jr. by Tomy Battery Replacement
- . Robie Jr. by Radio Shack Battery Replacement
- Mr. D.J. by Tomy Disassembly & Assembly
- Dingbot 8 by Tomy 8 Disassembly & Assembly
- . Verbot : Flipbot : Hootbot : Chatbot by Tomy Repair Pictures
- Armstrong TM Mobile Command Poweride Repairs Teardown Scavengers Workshop



HERE ARE SOME GUIDELINES FOR THOSE INDIVIDUALS WHO WANT TO REPAIR THEIR ROBOTS.

Robots - Repairs Information & Tips - The most disheartening thing to see is getting a robot (your) robot and finding that it does not work or is broken. The first thing is: Oh ????. Then! what do I do? The answer is, "GET IT FIXED or FIX IT". I have worked on, and have seen what passes for repairs on a lot of robots and my answer is: If you can get someone else (a professional) to work on it, do that. Send it out for repair before you break something else that is irreplaceable. Remember leave it alone.

Warning: you proceed at your own risk! With that in mind if you have to work on the robot, here are several suggestions that is listed as rules in repairing robots;

Rule 1: If you can get someone else (a professional) to work on it, do that.

Rule 2: Don't open the robot - If you can possibly avoid it. Put in strong, fresh batteries, do not use cheap batteries. Rechargeable are ideal because they guarantee a good current. Fiddle with the switch; you'll be surprised how often a toy burst in to life when the switch is in an in-between position.

Rule 3: Make a note of how it goes together. - Look carefully at the robot. Take pictures, lots of pictures, there is never enough. Make a written note of the wiring. You have no idea how difficult it can be to work out where a loose wire belongs. The information will also come in useful at a later date. You'll find that more wires come loose as you repair a toy and you'll soon forget where they go. The connections to the battery box. These frequently break loose, or the solder joints dry up with age. Repairs are simple: a good clean up of the contacts and loose wires elsewhere with a light touch of a soldering iron. Wires might be loose, but more likely is the problem of poor a contact between the switch components. A careful cleaning of accessible contacts can solve things. Don't reassemble the toy if further repair is required.

Rule 4: Robot + Water - Disaster Above all, don't immerse a robot in water, no matter how dirty it may be and how thoroughly you may intend to dry it. Water ruins the circuit board, card insulators that hold the battery contacts and various internal switching devices. You'd be amazed at how many people dunk the whole robot in bowl of hot soapy water.

Rule 5: Take your time and work slowly replacing what parts that is needed with similar parts, don't drill holes in the plastic or metal. Remember you have time to find or make the right parts. The robot has twenty three years (23) of waiting a few weeks would not hurt.

Rule 6: For Circuit Board Repairs use Rule 1. If you have completed the above and have been successful, Congratulations! if not go to Rule 1.

For the Tinkers and Hobbyist:

Now that I have given you some rules that is necessary when repairing your robot I will take you to the real world. The complete robots that has been in the family for years and in pristine condition is rare, and will cost you a great deal of money. Even then remember it is old and will have problems. For most of the robots when you buy, trade, get one, nine out of ten times it will be dirty, corroded and missing parts. I will focus on, and I am referring to, the larger robots including the plastic robots that need attention.

You will need several things to repair and rebuild your robot: A Multimeter, Digital Camera, Computer, Information, Tools, patience and the ability and dexterity (manual skills) to fix things electronically and mechanically and the time to find parts.

Or if you are extremely good, a small knife, screwdriver, pliers, file, chisel, small hammer, sandpaper, pencil and paper. Myself, I need all of the above, for I also use the camera and computer for other things. Remember there are no parts readily available for old robots.

- Step 1. The first thing you must do if you can is to temporary get it working. Once you do that then you can start.
- Step 2. Disassemble the robot completely, recording every step, and put the electronics in a separate place.
- Step 3. Clean all of the parts with the proper cleaners. (Remember plastic and metals need different cleaners.)
- Step 4. Clean the electronics and circuit boards. (There are many processes in cleaning electronics and you should look up the procedures and cleaners.)
- Step 5. Reassemble the robot reversing the recorded steps.
- Step 6. At this stage you are ready to troubleshoot the robot to get it working.
- Step 7. Listed above are several procedures for disassembly and assembly.

There is no warranty expressed or implied with this procedure. By using any information from this web site, you agree not to hold responsible this site, me, nor any of its representatives, for any injuries and/or damages, both physical and/or psychological, that may arise from the use and/or misuse of anything derived from this site. The user further agrees that such information/pictures does not constitute any guarantee of accuracy, safety or reliability, and that cannot be held responsible for any way. The user agrees to proceed at their own risk.





Original Omnibot - 2.76 X 1.85 X 4.15 Omnibot 5402 - 6v 4.0 ah Sealed Lead Acid Battery



Original Omnibot - 2.76 X 1.85 X 4.15 yuasa np-4-6w 6v 4.0 ah Sealed Lead Acid Battery



Replacement: B.B. Battery BP5-6 Sealed Lead Acid Battery 2.76" x 1.85" x 4.10"



Replacement: CSB GP 645 6V 4.5Ah Sealed Lead Acid Battery



Replacement: WERKER WKA6-5F 6V 5Ah AGM Sealed Lead Acid Battery

The above Battery is for the Tomy Robot Family. Special attention must be taken for the plug polarity. Here are some web sites to look for batteries:



Replacement: UB 645 - 6V 4.5AH 70mm (2.76") X 47mm (1.85") x 101mm (3.98") Sealed Lead Acid Battery



Replacement: UB 1280 12V 8Ah Sealed Lead Acid Battery

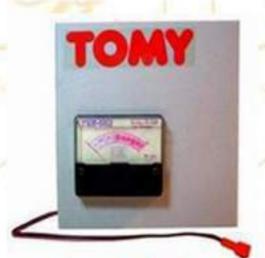
The above Battery is for the Tomy Armstrong 8 Mobile Command Poweride - 6026. Special attention must be taken for the plug polarity.



Replacement: TXR-002



Battery for TXR-002
Tomy Zenergy 6N-1201A
6 Sanyo N-120TA ni-cad cells making
7.2 volts at 120mah.



Charger for TXR-002 Tomy Zenergy 6N-1201A



Charger for TXR-002 Tomy Zenergy 6N-1201A

The above Battery and Charger is for the Tomy TXR-002 Special attention must be taken for the plug polarity.

Battery Chargers: Special attention must be taken for the plug polarity. (Original & Replacement Equipment)



Omnibot 2000 input 240 V 50 Mh 6VDC 400ma



Omnibot Tomy 2EX-5441 6VDC 300ma



Hearoid / OOM TAMRADIO 25A-3532 400ma



Omnibot MK II TAMRADIO 29A-4135 400ma



Robie Sr. TC-604U 6VDC 600ma

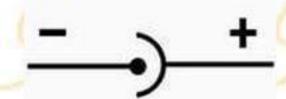


Omnibot Replacements Radio Shack Battery Charger 60-2398 6VDC 600ma

Battery Chargers will range from 300ma to 600ma for lead acid batteries. See battery specifications and their recommendations. Special attention must be taken for the plug polarity.

Plugs and Jacks Polarity: Special attention must be taken for the plug polarity. (Original Equipment)





2.5 mm CO-AX Plug Radio Shack ® Robie Sr ® Battery Charger 60-2398 6VDC 400 ma

Omnibot [®] Series - Omnibot [®] 5402; Hearoid; [®]
Omnibot [®] MK II, Omnibot [®] 2000 5405
TAMRANDIO [®] 25A-3532 - 6VDC 400 ma





You can program your Omnibot * 2000, Omnibot * 5402, Hearoid * and Robie * Sr. Robots in three different ways. One is from the Robot itself, two is from a Dual Cassette Player and Recorder which is (Analog to Analog) or the third way is from a Computer to a Cassette Recorder, that is from (Digital to Analog). Of the three the first and second way is inexpensive, quick, simple and less prone to errors. The first way is contained in the users manual and is under the download page. I will show both the second and third ways here.

At the bottom of this page contain links to files that can be downloaded. This is an ongoing process and the files will be upgraded as improvements are made.

Cassette Player and Recorder Dual Track Analog to Analog



Computer to Cassette Recorder

Digital to Analog



Computer to Robot or CD
Computer Programming



Information Free Computer Program Available

Demo and Operating Program files for the Omnibot * 2000, Omnibot * 5402, Hearoid * and Robie * Sr. Robots is stored in wav format (1st Copy).

You can download and copy these files directly to a cassette, and use them to check your robot.

Download File Size 6.9 MB .mp3

Omnibot \$2000 - Demo Tape and Programing

from The Old Robots - 4/1/2015

B .mp3 Download File Size 8.2 MB .wav



Robie Sr. from Radio Shack - Original Demo Tape and Programing - 2/1/2008

Under Construction



Omnibot [®]Demo Tape - Tape and Programing from The Old Robots - 2/1/2008

Under Construction

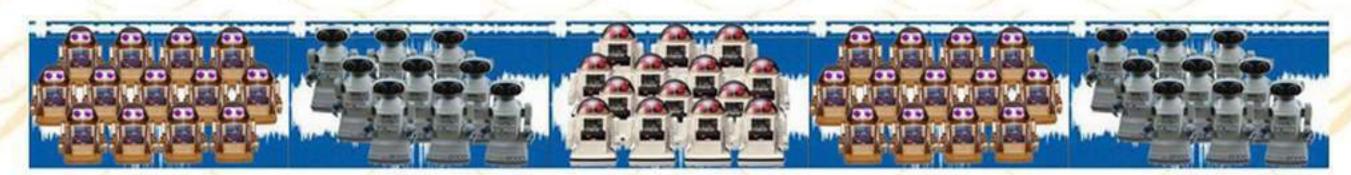


Hearoid [®]Demo Tape - Tape and Programing from The Old Robots - 2/1/2008

Please give feedback to improve these Recommendations and Files for the next user.

There is no warranty expressed or implied with this procedure. By using any information from this web site, you agree not to hold responsible this site, me, nor any of its representatives, for any injuries and/or damages, both physical and/or psychological, that may arise from the use and/or misuse of anything derived from this site. The user further agrees that such information/pictures does not constitute any guarantee of accuracy, safety or reliability, and that cannot be held responsible for any way. The user agrees to proceed at their own risk.







Cassette Player and Recorder Dual Track

This process uses a Dual Cassette Player and Recorder which is (Analog to Analog). This way is inexpensive, quick, simple and less prone to errors. Their is a BUT

You will need an Originally Recorded Cassette Tape.

Now you can program your Omnibot [®] and have it work <u>without a controller.</u> You can take a pre-existing program tape and create a second tape to run your Omnibot [®] Robot with new different conditions.

This process is not new, it has always been available but is a little used function. A whole world has re-opened for the Omnibot ® owners.

You can move into a world where audio tone, sequence and timing, with simple editing and recording, can be used to create new program tapes that will breath life into your Omnibot and let it become your stand alone Robot.

To program your robots you will need an original recorded cassette tape and a Dual Record and Play Cassette Player. Omnibot © Controller Welcome! But Not Necessary. Use your Demo Cassette Program to check your Omnibot © Robot and your Operating Programs to have it work without a controller.

The following are some of the recommendations to copy and create programed tapes. This has been successfully done but is not always 100% successful. Follow the recommendations and the steps and you should get the same results. (Remember different Robots and Cassette Recorders can act different.)

Please give feedback to improve these Recommendations and Files for the next user.

SOFTWARE

- NONE IS NECESSARY
- Record from the original tape, stopping and starting the recorder, while you select from the original tape what you want to record. This will take some trial and setting until you get the experience.
- . If you use software to monitor what you are doing, use State of the Art Recording Technology Software
 - O WavePad Recording Technology http://nch.com.au/wavepad/index.html
 - 0 &/or
 - o Freecorder Recording Technology http://www.freecorder.com/
 - READ THE INSTRUCTIONS AND INFORMATION THAT COMES WITH THIS SOFTWARE.
 - o If you are recording the Omnibot Mono tape, be sure to record in Mono mode.
 - o A recording made with a 44100 sampling rate will carry frequencies up to 20000 Hz.

HARDWARE

- · A good Dual Mono or Stereo Cassette Player and Recorder.
- · A high quality tape is necessary.
- . The Omnibot 8 Robot in good working condition.

PROCESS

- · Cassette Player & Recorder Hook up the cassette player and recorder, and test the process of recording between cassette tapes.
- Omnibot® Robot Insert a cassette tape in the Omnibot® Robot and following the instructions (1) in that manual.
- · Record and create a programmable tape. (If you have a controller, if not get a tape from someone that can record and has a controller.)
- Record from the original tape, stopping and starting the recorder, while you select from the original tape what you want to record. This will take some trial and setting until you get the experience.
- Insert the programmed cassette into the Omnibot® robot and activate using the instructions (1) that come with the Omnibot®

(1) Use and follow the instructions and procedures in the Omnibot 2000, Omnibot and Robie Sr. Operating Manuals to create your program tape.

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Computer to Cassette Recorder

I have an Omnibot but lost my controller and my Omnibot does not work without it. Not True! Download your Demo Program to check Omnibot Robot and Operating Programs to have it work without a controller in different conditions. To program your robots you will need both hardware and software.

Omnibot [®] Controller Welcome! But Not Necessary. You can also make your own tapes without a controller by just downloading a program and modifying it. This is not new it has always been available but is a little used function.

A whole world has re-opened for the Omnibot ® owners. You can move into a world where audio tone, sequence and timing, with simple programs on your computer, can be used to create cassette tapes. This programming will breath life into your Omnibot ® and let it become your stand alone Robot.

For you to copy and edit the program tapes from your robot with your computer you must first recognize that your computer must be set up to handle audio files. Computers and there associated hardware (Video and Audio boards and drivers) do not always support the whole range with quality reproduction of your recorder programs. You need special recording software and hardware with conversion plugs and jacks for this process.

The following is recommended if you want to successfully transfer files from your audio cassette to and from your computer. Examples are shown and specific hook-up for different equipment and software will vary.



Example # 1 Mono input



Example # 2 Mono input



Example # 3 Stereo input



Example # 4

The following are some of the recommendations to copy and create programed tapes. This has been successfully done but is not always 100% successful. Follow the recommendations and the steps and you should get the same results. (Remember different computers act different.)

Please give feedback to improve these Recommendations and Files for the next user.

SOFTWARE

- . Use State of the Art Recording Technology Software
 - · WavePad Recording Technology http://nch.com.au/wavepad/index.html
 - 0 &/or
- Freecorder Recording Technology http://www.freecorder.com/
- READ THE INSTRUCTIONS AND INFORMATION THAT COMES WITH THIS SOFTWARE.
- . If you are recording the Omnibot Mono tape, be sure to record in Mono mode.
- . A recording made with a 44100-sampling rate will carry frequencies up to 20000 Hz.
- Record and edit the tape before saving. Save only once from the original in MPG -wav format, because you lose audio quality every time you save the file.

HARDWARE

- · A good Mono or Stereo Cassette Recorder with an Auxiliary (AUX.) input.
- A high quality tape is necessary.
- . The appropriate shielded plugs, jacks and cables for the recorder. The key word is shielded.
- The computer.

PROCESS

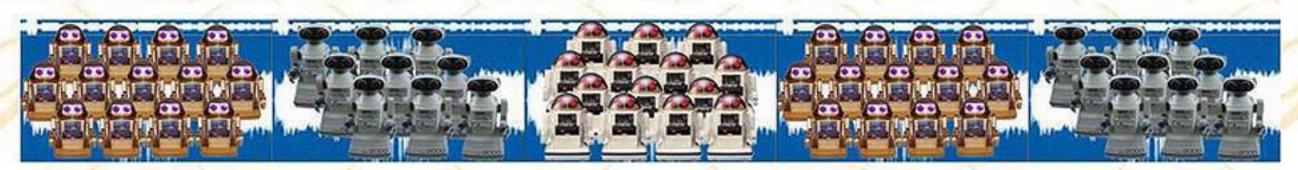
- Computer & Recorder Hook up the cassette recorder to the computer and test the process of recording to and from the computer.
- Omnibot® Robot Insert a cassette tape in the Omnibot® Robot and following the instructions (1) in that manual. Record and create a programmable tape.
- Transfer the cassette to the recorder and then transfer the program to the computer with the recommended software.
- . Record and edit the cassette tape on the computer and save it directly to the recorder, then save it to the computer.
- Insert the programmed cassette into the Omnibot® robot and activate using the instructions (1) that come with the Omnibot® robot.

Demo and Operating Program files for the Omnibot * 2000, Omnibot * 5402, Hearoid * and Robie * Sr. Robots is stored in way format (1st Copy). You can download and copy these files directly to a cassette tape, and use them to check your robot.

(1) Use and follow the instructions and procedures in the Omnibot Donnibot Donnibot and Robie Sr. Operating Manuals to create your program tape.

There is no warranty expressed or implied with this procedure. By using any information from this web site, you agree not to hold responsible this site, me, nor any of its representatives, for any injuries and/or damages, both physical and/or psychological, that may arise from the use and/or misuse of anything derived from this site. The user further agrees that such information pictures does not constitute any guarantee of accuracy, safety or reliability, and that cannot be held responsible for any way. The user agrees to proceed at their own risk.





Special Thanks go to Avery Pennarun from Apenwarr, for now you can utilize several means to control the Robie Sr. Robot. I have utilized his program to create the Computer Program and Control for the Omnibot 5402 Robots. All of the following programs modifications/examples has been created, tested, completed, and do work.



(figure 1)

EXAMPLES:

- a. With the Original Controller. (See the Operating Manual)
- b. Without a Controller, but with Original Tape. (Analog to Analog)
- c. Without a Controller, with original tape from the internet. (Digital to Analog)
- d. With/Without controller with computer on-line or off-line. (Computer Programming and Control Preferred Method)

COMBINATIONS:

- dl. With the Original Controller.
- d2. With a 49 MHz Two Way Radio. (Modifications will be necessary)
- d2-a Operating R/C frequency:
- (Remote 3 Frequencies: 49.860 Mhz (US), 27.145 Mhz (Europe), 40.680 Mhz (TAL))
- d3. With a Computer with #d1 or #d2 and/or #d4, #d5, #d6. (Software will be necessary)
- d4. With the Internal Cassette with #d1 or #d2 or #d3.
- d5. With a External Cassette with #d1 or #d2 and #d3.
- d6. With a External CD with #d1 or #d2 and #d3.
- d7. With any or all of the combinations above.

dl. With the Original Controller.

A. Robie Sr. * or Omnibot 5402 * works with his controller (figure 6). You could record a program onto a cassette tape (figure 8, 9) and play it back, and he'd do what you programmed him to. You can modify the controller and move into the world of computers and programing, without the robot activated.

d2. With a 49 MHz Two Way Radio. (figure 2, 3) (Modifications will be necessary and use of (#d3).

Note: (d2-a) Operating R/C frequency: (The Remote came in three (3) Frequencies: 49.860 Mhz (US). 27.145 Mhz (Europe), 40.680 Mhz (TAL)). This modification does not deal with the Europe (EU) or Asia (TAL) frequencies, due to the fact that the equipment and robots was not available. However the software should work if you can obtain a Two Way Radio operating on those frequencies.

A: What to do for present day control? Get a 49 MHz Two Way Radio that broadcast and received on the same frequency as Robie Sr. * or Omnibot 5402 * to replace the original controller that will work with your robot. Add a switch and an audio jack in parallel with the microphone, so that you can switch between the two, thus allowing you to input and transmit whatever signal you want to over the airwayes to control Robie Sr. * or Omnibot 5402 *

d3. With a Computer with (#d1) or (#d2) and/or (#d4, #d5, #d6). (Software will be necessary)

A. With the computer and software you can run to the external cassette (#d5) or the CD recorder's (#d6) (figure 4, 5) or through the original controller or the 49 MHz Two Way Radio directly to the robot, and/or to the internal cassette (#d4), or all of the above. What this gives you is the ability to create a cassette tape to the robot without the controller directly through cables and adapters (figure 7) from the computer. With the controller or the 49 MHz Two Way Radio this can bring you into the age of CD's that is readily available today and eliminate the need for the cassette. Audio cassettes are not readily available today, and not easy to hook up to a computer and connect to the internet to read and write.

Your upgrade is now complete and your next step is to downloaded a .wav recording of Robie Sr. * or Omnibot 5402 * original demo tape (it's important to use plain .wav format, as mp3 compression risks disrupting the pure signal) and burned it to a CD.

To resolve these issues you need a means of communicating, recording, playing and programming.



49 MHz FM Two Way Radio (figure 2)



49 MHz FM Two Way Radio (figure 3)

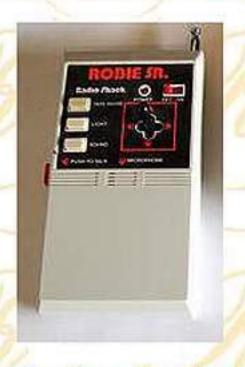


CD Player (figure 4)



Two Way Radio & CD Player (figure 5)





Robie Sr. 8 or Omnibot 5402 5 Controller (figure 6)



Demo Tape and Cables (figure 7)



Cassette Tape (figure 8)



Cassette Recorder & Player (figure 9)



Cassette Recorders & Player(figure 10)

SOFTWARE:

The software program is an extremely basic form of frequency shift keying where there is one frequency for each button on the remote control. The sound would be emitted from the remote for as long as you held down the button or pulled the joystick in a particular direction.

From the Robie Sr. * or Omnibot 5402 * 1980's remote control, the control mechanism is still exactly how most remote control devices work to this day.

The remote control would form the sounds it wanted to send, then modulate them to 49 MHz FM (the usual frequency used by consumer remote control devices in the past). The robot would receive the signal, demodulate it back to listenable sounds, then recognize the different frequencies.

In the case of a tape program, it would simply skip the modulation/demodulation steps and process the sounds directly from the tape.

Computer Controller Programs

Programming: Add a computer and software. (figure 11, 12)

Computer Control is the last step: Once you have a digital file and the ability to transmit from any audio equipment you want, the real answer is clear: computer control!

Use the application in Delphi, thanks to the TJvWavePlayer component in the awesome open source JVCL library by Avery.

After clicking the "Sound On" button, any sound from my computer can now be beamed into Robie Sr. * or Omnibot 5402 * , so I can have him move around and play astonishingly - low - fidelity MP3s at people!



(figure 12a)



© Omnibot 5402

Forward

Bleep

Left

Right

Sound off

Back

(figure 12b)

DOWNLOAD:

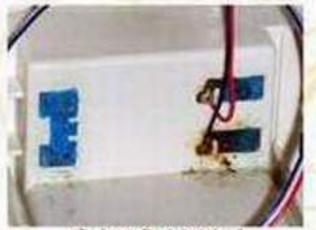
You can download the software in the zip format for: Robie Sr. S Computer Controller Program

You can download the software in the zip format for: Omnibot 5402 * Computer Controller Program

For further information on the Robie Sr. * or Omnibot 5402 * Computer Controller Conversions, please Email me.

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(Before) Bad Original



(After) Replacement



(Before) Bad Original



(After) Replacement

Omnibot 5402 that needs to be replaced. They are corroded and not usable, (Replace)

The above figure is the contacts in the. The above figure is the contacts in the Omnibot 5402 that has been replaced.

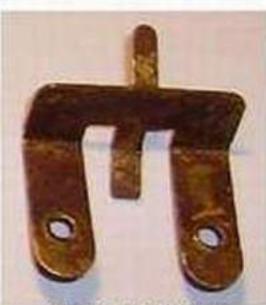
The above figure is the contacts in the Omnibot 5402 that needs to be replaced. They are corroded and not usable. (Replace)

The above figure is the contacts in the Omnibot 5402 that has been replaced.

Refurbushed - Replacement Contact for the Omnibot Family Robots



The following figure on the left is contacts taken from a Omnibot 5402 Controller that is corroded and not uasble. It has to be replace.



Refurbushed Original

The following figure on the left is contacts taken from a Omnibot 5402 Controller that was corroded and not uasble. It has been refurbushed and can now be reused.

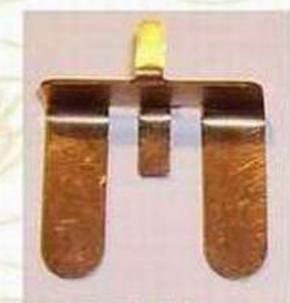
Bad Original (Replace)

NEW - Replacement Contact for the Omnibot Family Robots



Step # 1

Step #1. Omnibot 5402 contacts created from scratch. It uses contact material to create the blank.



Step #2

Step #2. Bend the contacts at the appropate points

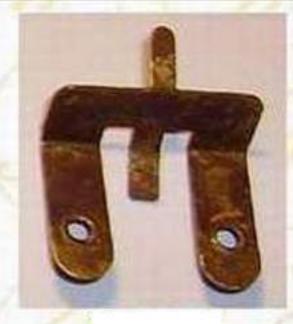


Step #3 & #4

Step #3. Using a punch indent the contact and then using a drill with a proper bit drill the holes in the contact.

Step #4. Heat treat the contact. You now have a finished part.

Replacer



The following figure on the left is contacts taken from a Omnibot 5402 Controller that was corroded and not uasble. It has been refurbushed and can now be reused.



Step #1. Cut the contacts at the appropate points



Step #2. Using a punch indent the contact and then using a drill with a proper bit drill the holes in the contact. You now have a finished part.

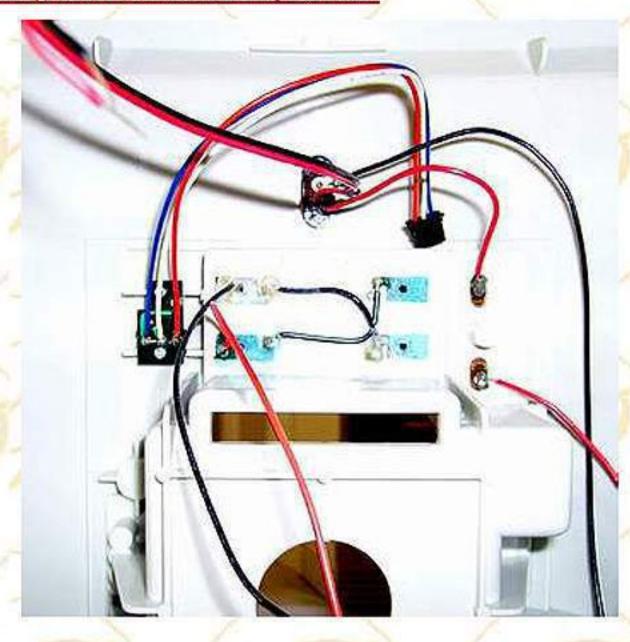


Use Brass 2/56 HEX MACH SC screws and nuts to fasten the battery contacts.



This process Addresses the Mechanical Disassembly of the Robot and does not address the Electronics. Accompany this Procedure is additional pictures that you can expand to see more details as needed. This Robot has IC's and Transistors and are of the earlier designs. Static discharge can damage the electronics. It is recommended that you have and use a Static grounding wrist strap.

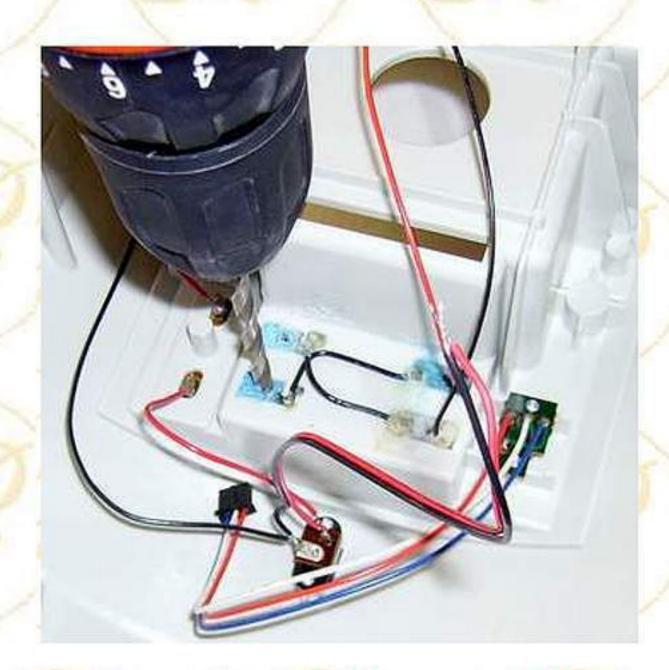
Replacing Hearoid Omnibot Battery Contacts.



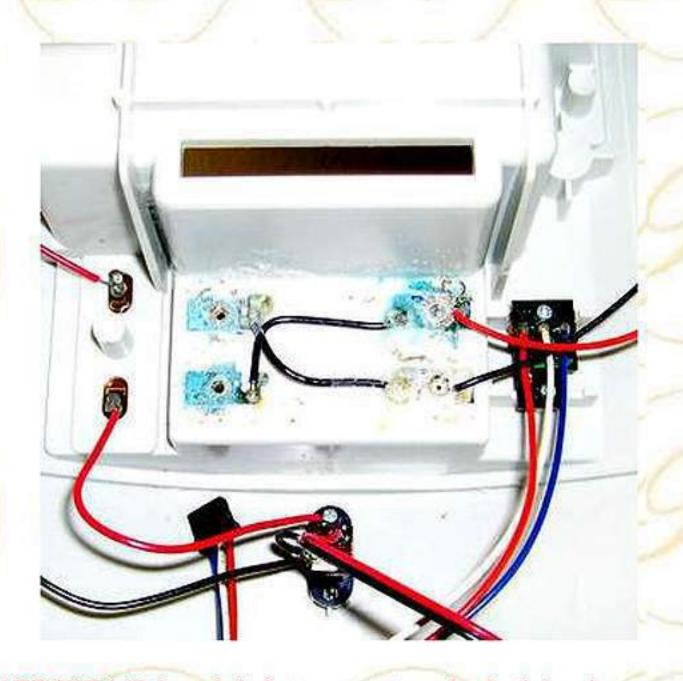
1. Check the wires to insure that you know how they are hooked up. These batteries are wired in parallel.



2. Make sure that the batteries are removed from the rear housing.



3. Place the housing flat on the table. Use a oversize drill bit and lightly drill the rim off the eye lit that hold the battery contacts in place.

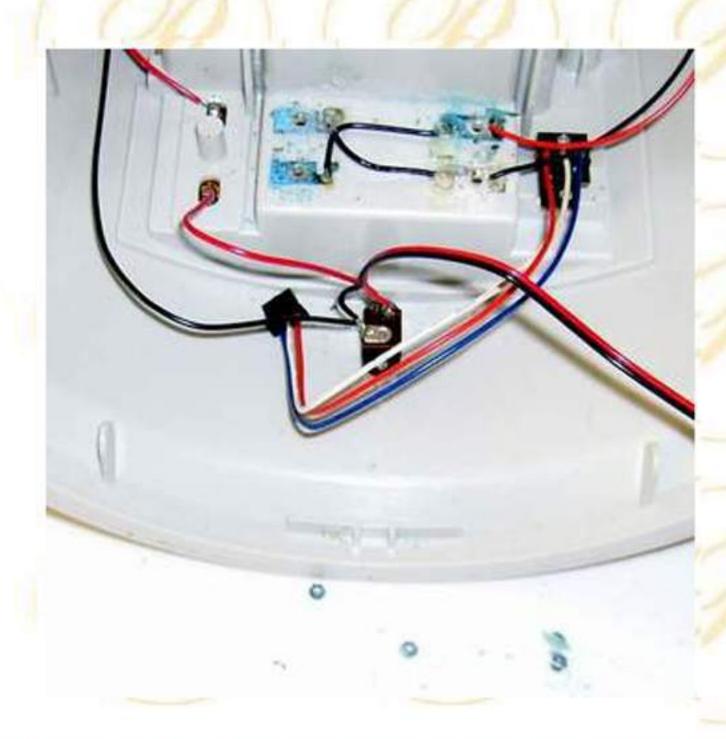


4. DO NOT drill through the battery contacts or the plastic housing.





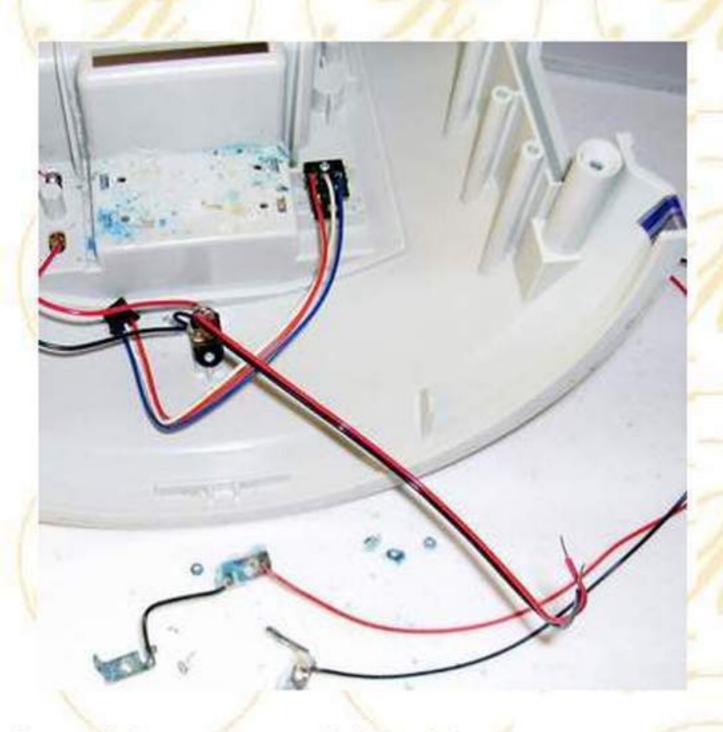
5. Once the eye lit ridge is removed take a punch smaller than the hole and gently tap all four of the eye lit out.



6. This picture shows the eye lit removed from the housing and battery contacts.



7. Gently pry the battery contacts out.

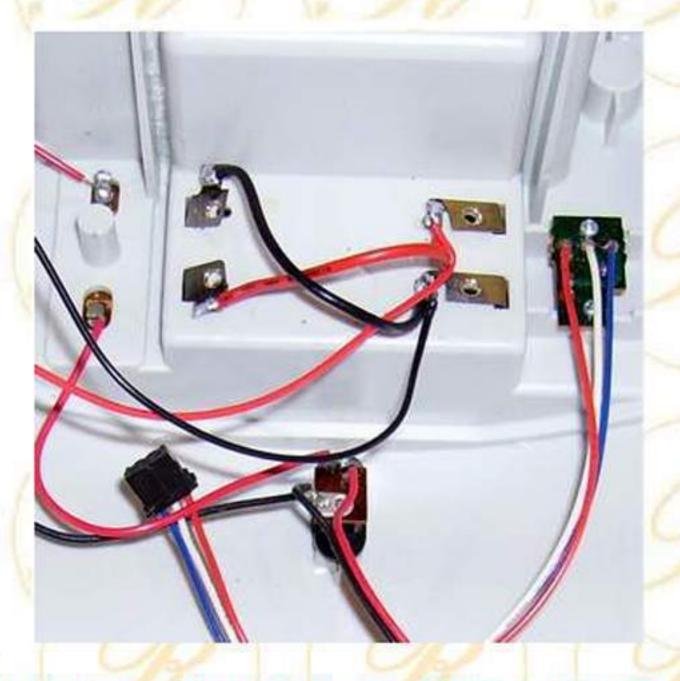


8. Remove the battery contacts and wires and plug.

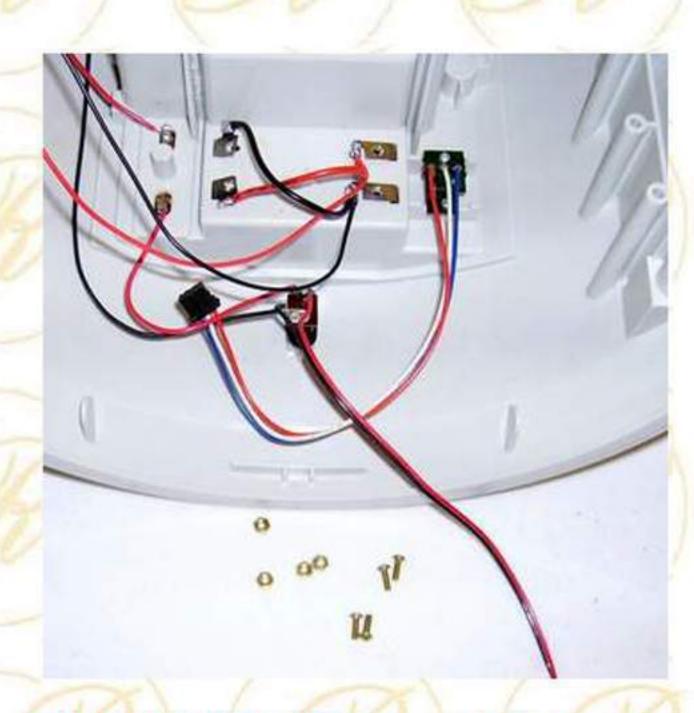




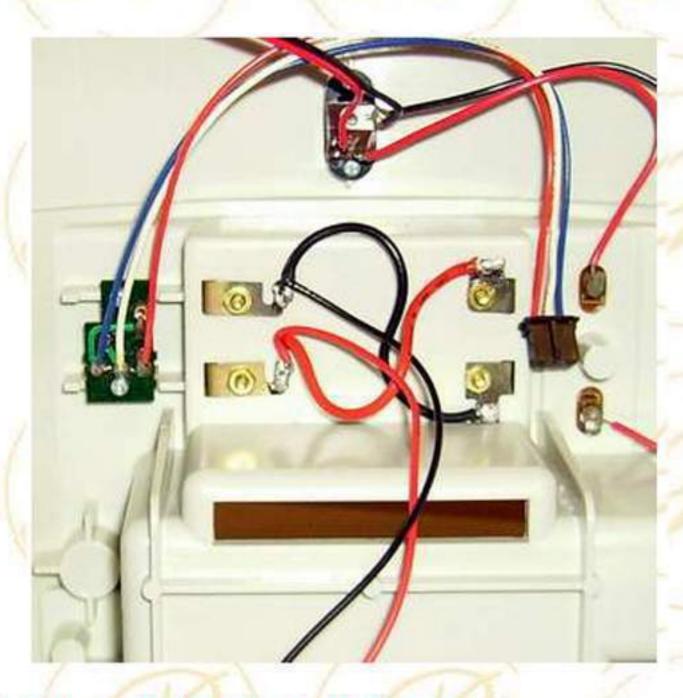
9. This is what the contacts with wire and plug will look like, Replace the battery contacts and solder the wires to the contacts.



10. After cleaning the housing reinsert the new battery contacts and wires into the housing.



11. Use Brass 2/56 HEX MACH SC screws and nuts to fasten the battery contacts.



12. This is what the finished product will look like.





13. Use a multi-meter to check conductivity both at the rear and the plug. Temporary install batteries into the robot housing to check the installation.



14. This is what the finished product will look like.



15. Install batteries into the robot housing. The operation is finished.

The Omnibot Family Battery Contacts

The Omnibot [®], Omnibot 2000 [®], Omnibot MK II [®], Hearoid [®] and the Robie Sr. [®] all have the same contacts, and can be replaced in the same manner. All of the clocks do not use two batteries and are not wired alike. Care should be taken to document the robot before using the replacement parts. The Robie Sr. [®] uses only one battery.



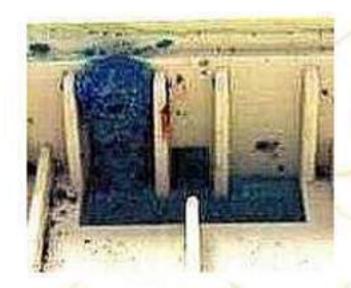
BEFORE











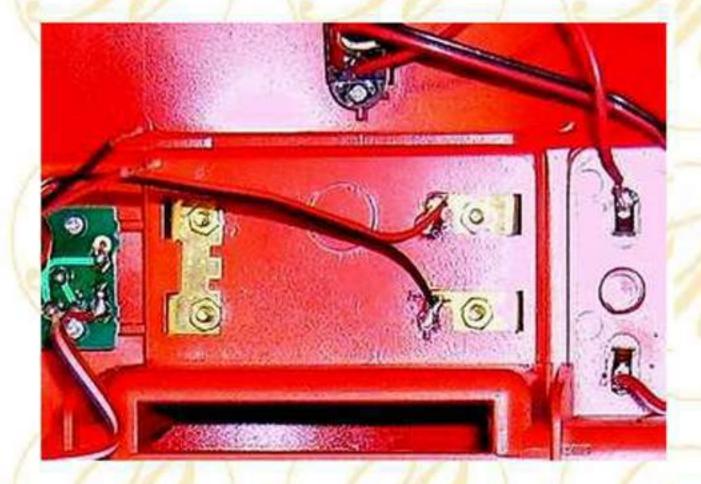


Shown above are some examples of contacts that are in the robots and controllers. This is one reason that they do not power up.

AFTER



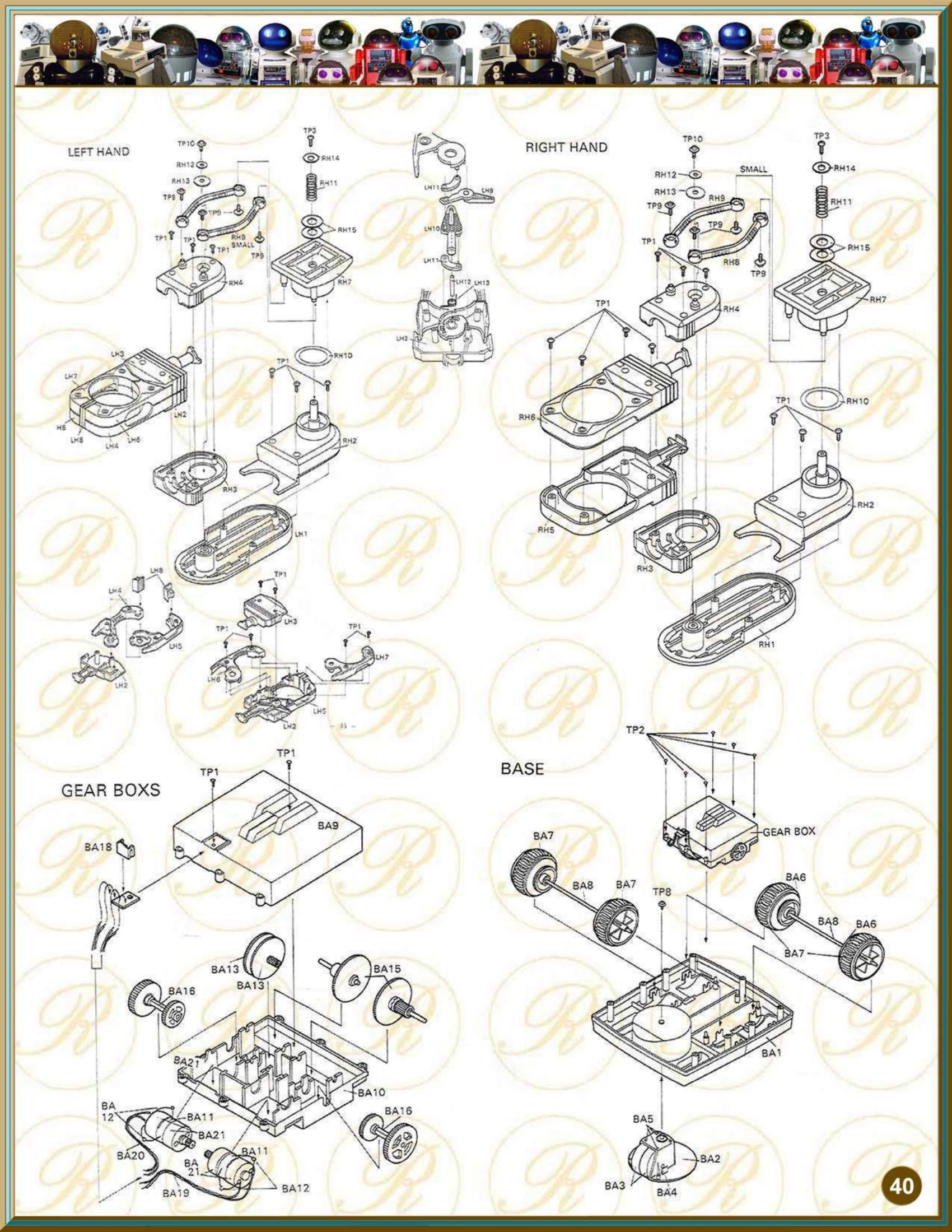


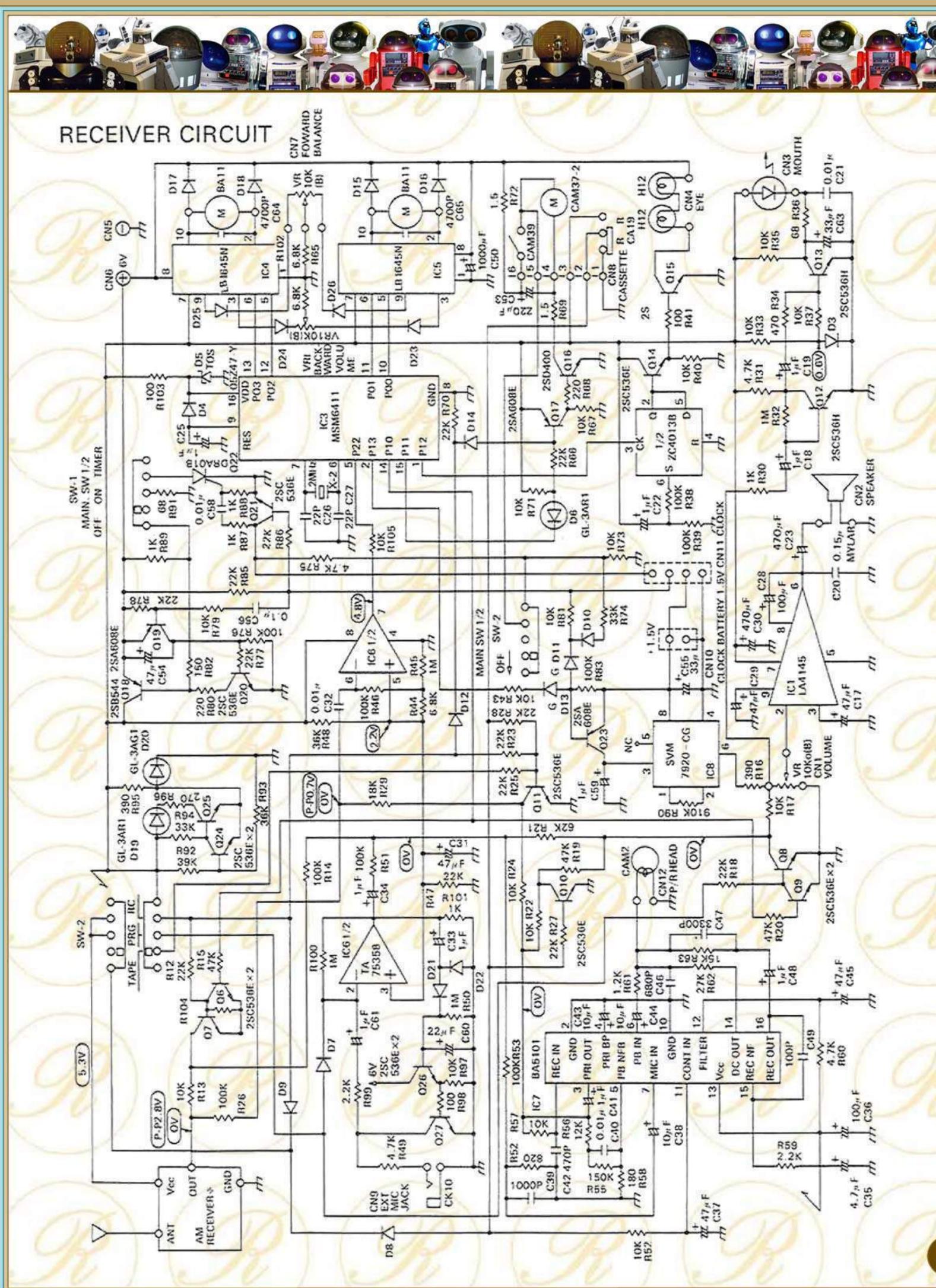


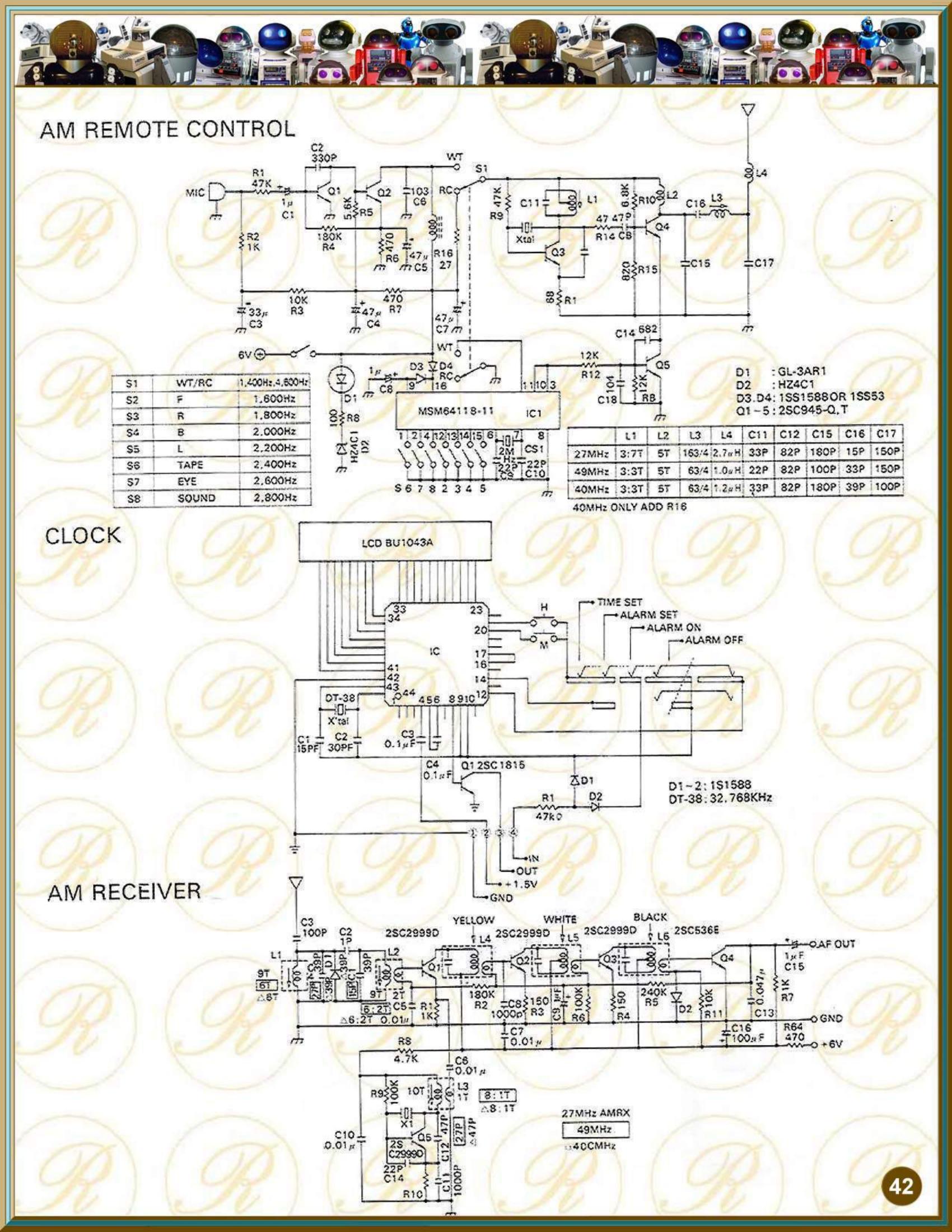


Shown above are some examples of contacts that have been replaced in the robots.

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Omnibot 5402 Robot Omnibot 5402 Robot





Omnibot 5402 Robot

Omnibet 5402 Robot



Omnibot 5402 Robot



Omnibot 5402 Robot

























Omnibot 5402 Silver Robot







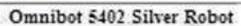




Omnibot 5402 Silver Robot

Omnibot 5402 Silver Robot







Omnibot 5402 Silver Robot

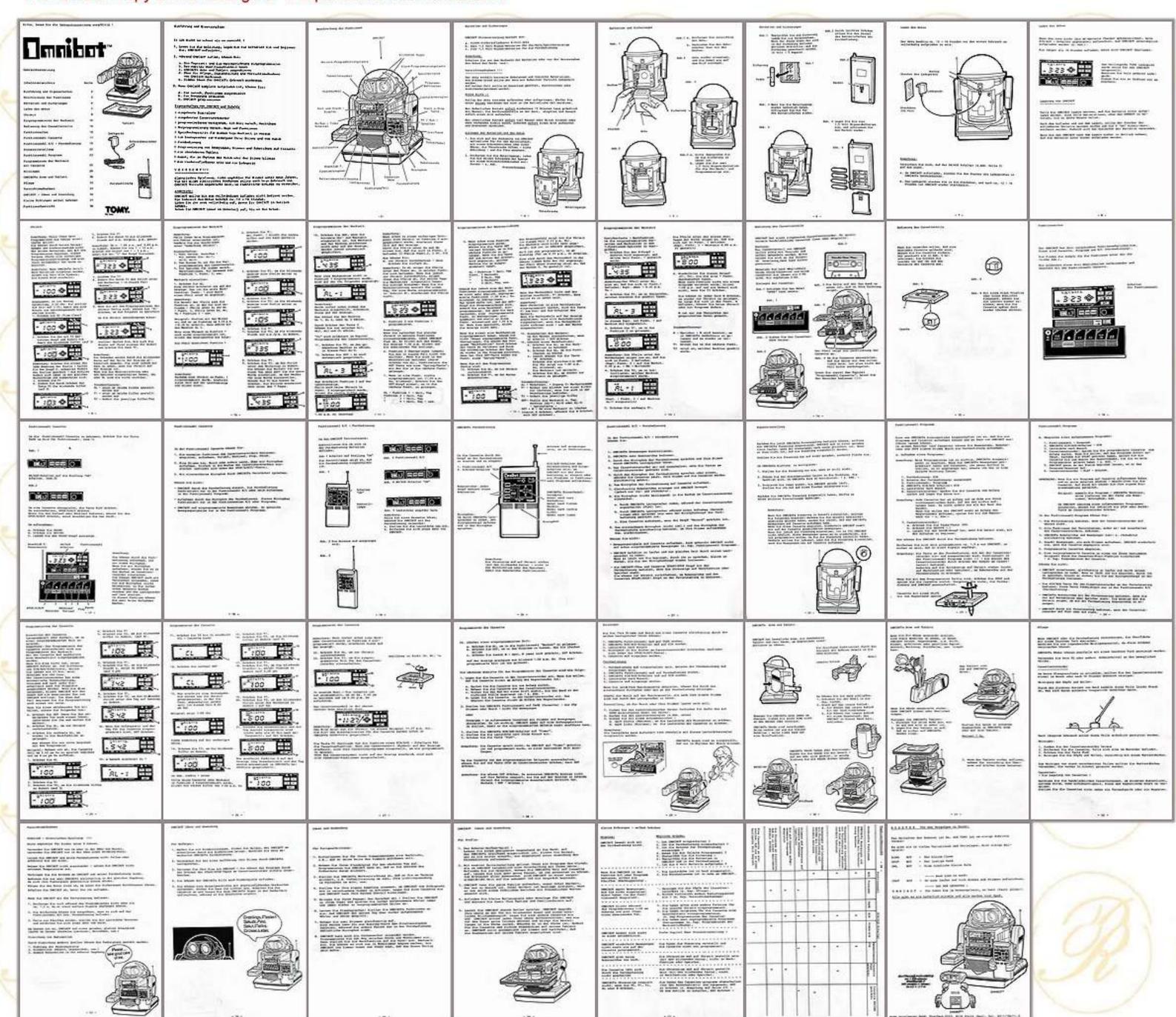




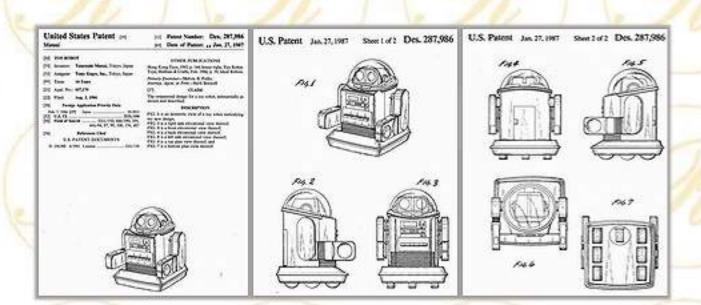


Omnibot MK-2 Robot



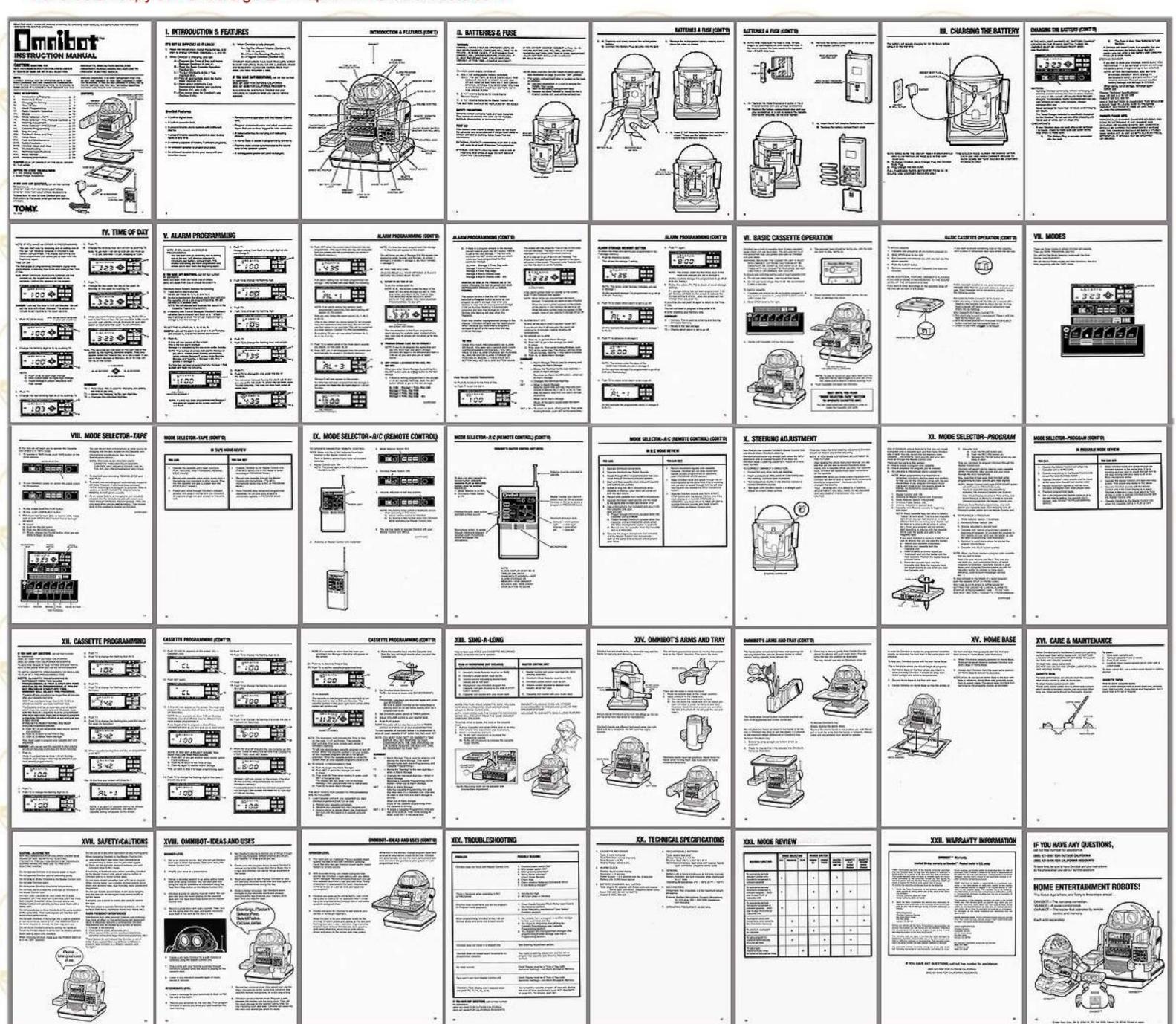


Omnibot I5402 / TR5000 nstruction Manual - German (Version II)



Omnibot Patents 4,654, 659





Omnibot 5402 / TR5000 Instruction Manual



Omnibot 5402 / TR5000





Omnibot MK II Japaneese Instruction Manual - Hiroshi Collection (Japan)



Omnibot 5402 Japaneese Instruction Manual - Hiroshi Collection (Japan)





Omnibot ® 5402/TR5000 By Tomy



Omnibot ® 5402/TR5000 By Tomy

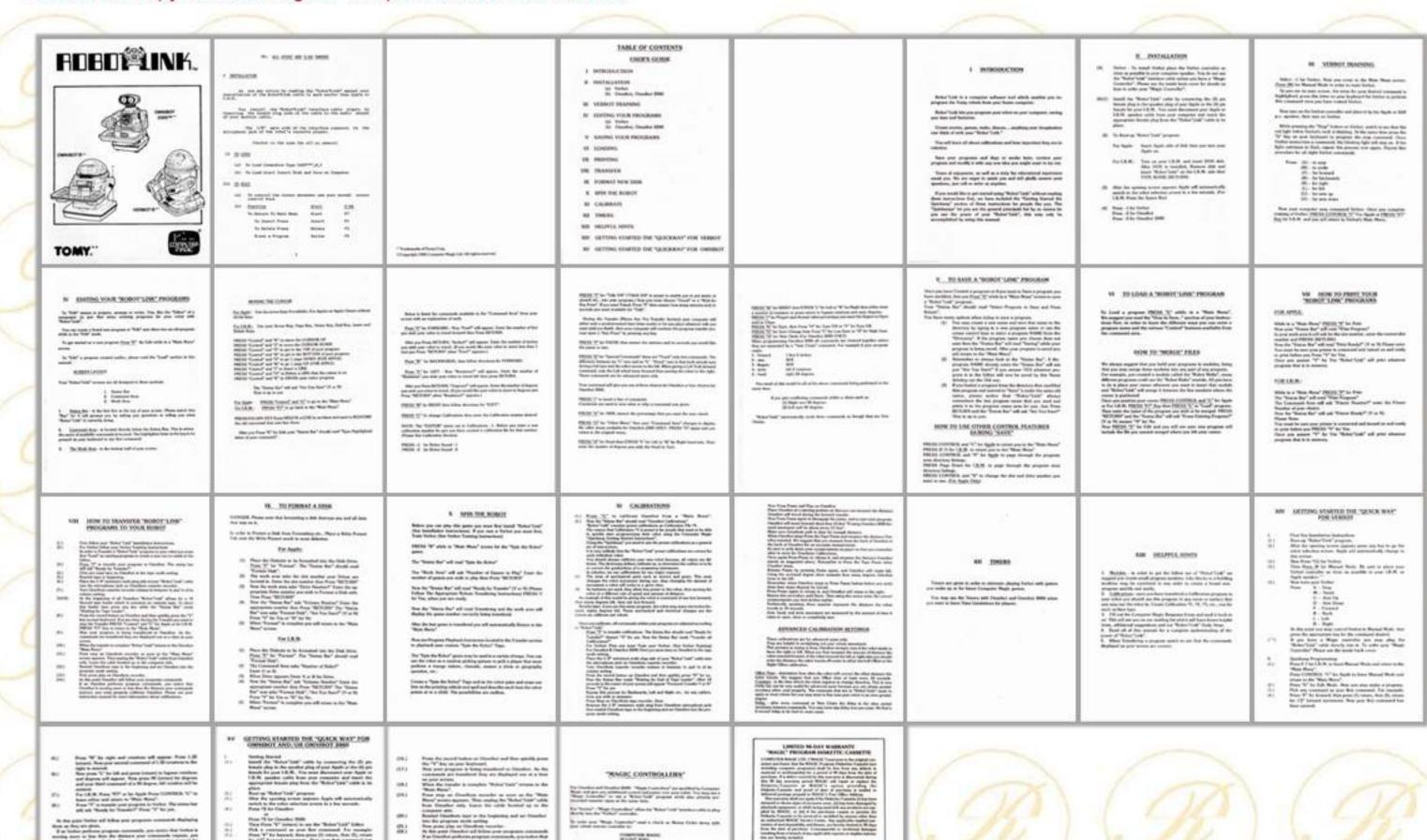


Omnibot ® 5402/TR5000 By Tomy



Omnibot ® 5402/TR5000 By Tomy





Tomy TM Robo Link TM by Computer Magic

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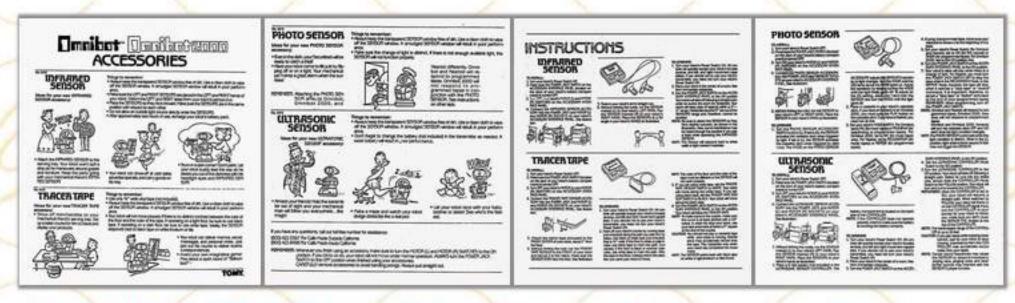
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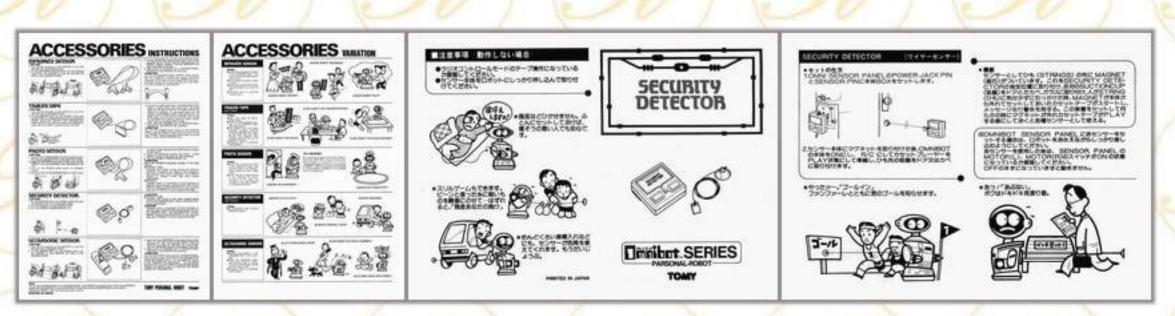
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Omnibot MK II ® TR5500/TR5503 By Tomy ® Accessories Instruction

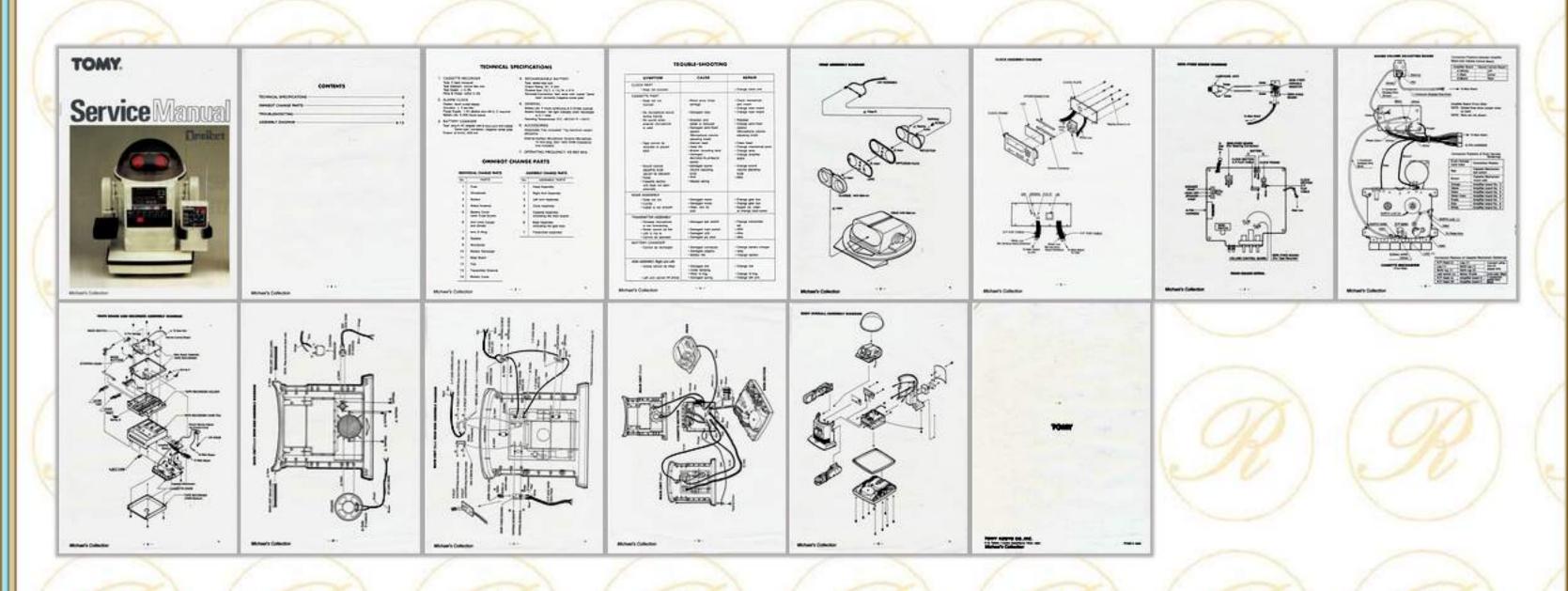


Service Name Consider 4 of 16 of 16

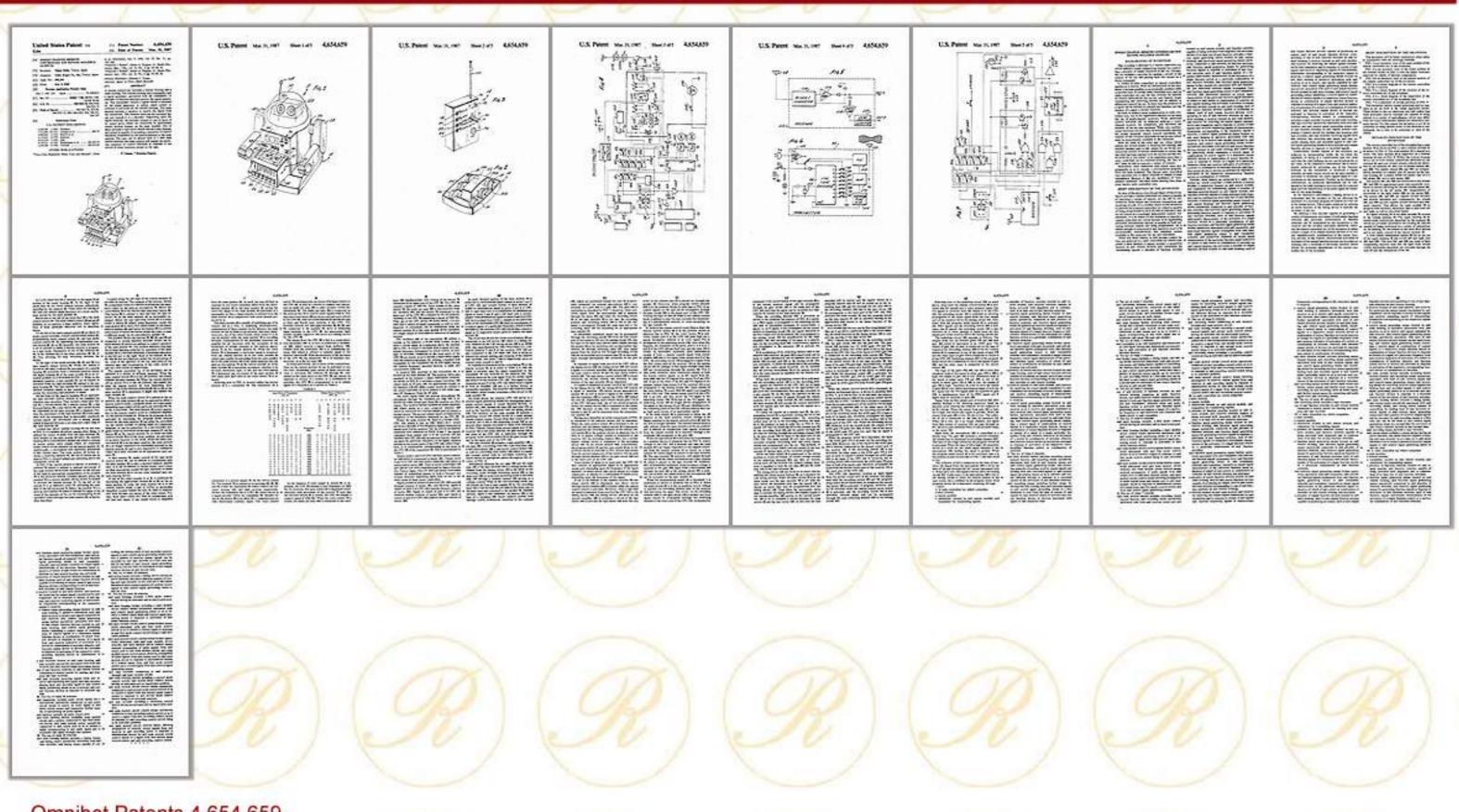
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Omnibot MK II ® TR5500/TR5503 By Tomy ® Accessories Instruction





Omnibot ® 5402/TR5000 Service Manual By Tomy



Omnibot Patents 4,654,659



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RB Robotics ® Still produces the RB5X®.

Androbot ® Produced the Topo,® Fred® and BOB® robots Educational and Personal Robots.

CBS Toys Produced for IDEAL TM the Electronic Maxx Steele TM Personal Robot

All Other © Companies That Manufacture The Robots, or © Companies That Claim Ownership

Heathkit ® Produced the Hero®, Hero Jr®, Hero 2000® and the Hero Arm Trainer®. Formerly from Heathkit, then Mobile Ed Productions, Now Proudly brought to you by the Robot Workshop!

Tomy Co Ltd. produced the Omnibot line of robots from 1982 up until 1988 TOMY Co., Ltd. - In Japanese, K.K. Takara-Tomy Founded March 1, 2006. Headquarters HQs in Japan, United States, United Kingdom, France, Hong Kong, Thailand. TOMY Co., Ltd. is the legal English name for the Japanese toy, children merchandise and Entertainment Company created on March 1, 2006 by the merger of "former" Tomy (Founded 1924) with Takara Co. Ltd. (Founded 1955). However, the new company made the unusual decision to adopt two different legal corporate names so while in English the name is simply TOMY, in Japanese the legal company name is the combined name, K.K. Takara-Tomy.

Radio Shack produced not limited to, but; include: Robie® Sr, Robie® Jr, Robie® The Talking Robot, Mobile Armatron®, Armatron®, Super Armatron®, and the Z-707 Iron Claw®

Axion produced robots from 1984 up until 1986/7 Axion produced a number of robots that include: Compurobot / George, Dogbot, Spybot, Talkabot. Compurobot was marketed as George in the UK by CGL but was Axion design. The Axion Company was founded by Nolan Bushnell (creator of Atari, Androbot Inc.) in 1984. Axion was largely sold to Hasbro.

The pictures used are originals taken, manufactured or created from my robots, composite of pictures made by me, the manuals, instruction sheets, pictures or information sent to me, Advertisement and letters saved from the 1980,s, Magazines no longer printed, and pictures from the internet from other hobbyists.

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