TREADMILL SERVICE MANUAL

T801/T802/T803

Customer Support Services

SERVICE MANUAL

HOW TO USE SERVICE MANUAL AND CONTACT CUSTOMER SUPPORT SERVICES

This service manual is applicable to Treadmill T801, T802, T803. **Note**: Information represents typical configuration and may differ slightly from actual equipment. The Service Manual provides recommendations of safe and efficient approaches to various situations. This manual is separated into six sections.

Refer to **TABLE OF CONTENTS** for section topics.

When an operation problem occurs, refer to troubleshooting guide and diagnostic mode to isolate cause. When applicable, guides are listed by problem symptom followed with suggestions of probable cause(s).

Once source of problem is identified, consult" How To…" guides for recommended repair procedures. "How To…" sub-sections are organized by replacement part or assembly name. For convenience, sub-section lists recommended "Tools Required" to complete specific function. Refer to **PARTS IDENTIFICATION** to identify proper name and number of part to order for repair of equipment.

A reproducible FAX order claim form is given in COMMUNICATING BY TELEFACSIMILE for convenient ordering of service parts.

To order, contact HS Customer Support Services.
Via FAX – 24 hrs/day, 7days/week.
Via telephone – Monday to Friday from 8:30 AM to 5:30 PM (GMT+8)
Via post – At address cited.

To speed HS response to your needs, please provide the following information.
1. Model number
2. Serial number
3. Symptom of problem
4. Part name and number to order (if known)

Before installing parts, review "How To…" and follow step by step procedures recommended to install parts safely and efficiently. If you have questions or comments please telephone, FAX or write us. We are:

Healthstream Taiwan Inc. – CUSTOMER SUPPORT SERVICES
16-3, Zichiang 1st Road
Jhongli, Taoyuan 32063 Taiwan R.O.C.

HS Consumer Treadmill
TABLE OF CONTENTS

SECTION V PARTS IDENTIFICATION

SECTION VI MISCELLANEOUS INFORMATION

SECTION I

TROUBLESHOOTING GUIDE

(1) **MCB**

Error	Name	Description	Display messages		
			T801	**T802**	**T803**
1	Speed sensor	Speed sensor is broken. Main power relay is broken (in the motor controller). Motor is broken or motor wire is badly connected. PWM circuit is broken.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select L Er (clear last error) and push Start to clear the error. Select SP t (Speed test)in disgnostic and push Start to test the treadmill. Check if motor is running. If it run, - Check the value of upper right LED. if it does not run - Check motor wire connection , brush contact first and then change the motor controller. Warning : Do not step on the treadmill, it is very dangerous.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select CLEAR (clear last error) and push Start to clear the error. Then you are in stop mode. You have to execute diagnostic mode again. Select PWM (Speed test)in disgnostic and push Start to test the treadmill. Check if motor is running. If it run, - Check the value of center LED. if it does not run - Check motor wire connection , brush contact first and then change the motor controller. Warning : Do not step on the treadmill, it is very dangerous.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select "LAST ERROR : "(clear last error) and push Start to clear the error. Select " PWM CHECK READY "(Speed test)in disgnostic and push Start to test the treadmill. Check if motor is running. If it run, - Check the value of center LCD module. if it does not run - Check motor wire connection , brush contact first and then change the motor controller. Warning : Do not step on the treadmill, it is very dangerous.

Error	Name	Description	Display messages		
			T801	T802	T803
2	Over speed	When treadmill runs faster than target speed. –Check power circuit. When user kicks the treadmill belt faster intentionally Frequency is very low. It usually happens during workout(14Km/h to 16Km/H).	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select L Er (clear last error) and push Start to clear the error. Push Stop key , and you are in Stop mode. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41 ? Check the motor runs or not , when you test it ? Warning : Do not step on the treadmill, it is very dangerous.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select CLEAR (clear last error) and push Start to clear the error. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41 ? Check the motor runs or not , when you test it ? Warning : Do not step on the treadmill, it is very dangerous.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select " LAST ERROR : " (clear last error) and push Start to clear the error. Push Stop key , and you are in Stop mode. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41 ? Check the motor runs or not , when you test it ? Warning : Do not step on the treadmill, it is very dangerous.
3	Safety key	Check safety key	If it happens frequently. Check safety key cable and switch. - Open the plastic and check. Next check the signal cable between motor and console. Change the console.	If it happens frequently. Check safety key cable and switch. - Open the plastic and check. Next check the signal cable between motor and console. Change the console.	If it happens frequently. Check safety key cable and switch. - Open the plastic and check. Next check the signal cable between motor and console. Change the console.

Error	Name	Description	Display messages		
			T801	**T802**	**T803**
4	Power circuit trip	Power circuit broken or motor locked or broken. Do not use treadmill, call service. Fatal error. It typically happens during workout(8Km/H to 14Km/H).	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill(Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select L Er (clear last error) and push Start to clear the error. Push Stop key, and you are in Stop mode. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not, when you test it? Warning : Do not step on the treadmill, it is very dangerous.	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill(Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select CLEAR (clear last error) and push Start to clear the error. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not, when you test it? Warning : Do not step on the treadmill, it is very dangerous.	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill(Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select "LAST ERROR : " (clear last error) and push Start to clear the error. Push Stop key, and you are in Stop mode. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not, when you test it? Warning : Do not step on the treadmill, it is very dangerous.

Error	Name	Description	Display messages		
			T801	**T802**	**T803**
5 51 52 53	Elevation	Check incline sensor or motor. Err 51,Err 52,Err 53 happen during self test or calibration.	Turn off and on the power. Push Stop + Slow together , and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select L Er (clear last error) and push Start to clear the error. Select tESt (Self test mode)in disgnostic and push Start to test the treadmill. Then elevation goes up to max and go down to min, please check the right side LED. It should be more than 200 when elevation in max, and it should be less than 50 when the elevation is min. Check the error message. Error 51, Error 52, Error 53 or no message. Check the elevation motor runs or not, when you test it ? Warning : Do not step on the treadmill, it is very dangerous. If no error message, Please send the value that is displayed of right side LED during self test to Healthstream R&D center. You have to do calibration again, if you want to use the elevation function. (Diagnostic mode)	Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select CLEAR (clear last error) and push Start to clear the error. Then you are in stop mode. You have to execute diagnostic mode again. Select TEST (Self test mode) in disgnostic and push Start to test the treadmill. Then elevation goes up to max and go down to min, please check the center LED. It should be more than 200 when elevation in max, and it should be less than 50 when the elevation is min. Check the error message. Error 51, Error 52, Error 53 or no message. Check the elevation motor runs or not, when you test it? Warning : Do not step on the treadmill, it is very dangerous. If no error message, Please send the value that is displayed of center LED during self test to Healthstream R&D center. You have to do calibration again, if you want to use the elevation function.(Diagnostic mode)	Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select "LAST ERROR : "(clear last error) and push Start to clear the error. Select "SELF TEST READY" (Self test mode)in disgnostic and push Start to test the treadmill. Then elevation goes up to max and go down to min, please check the center LCD module. It should be more than 200 when elevation in max, and it should be less than 50 when the elevation is min. Check the error message. Error 51, Error 52, Error 53 or no message. Check the elevation motor runs or not, when you test it? Warning : Do not step on the treadmill, it is very dangerous. If no error message, Please send the value that is displayed of center LCD module during self test to Healthstream R&D center. You have to do calibration again, if you want to use the elevation function.(Diagnostic mode)

Error	Name	Description	Display messages		
			T801	**T802**	**T803**
8	Fold frame	Fold frame in power on state (Angle sensor is worked)	OFF	OFF	TURN OFF POWER
11	Communicatio n	MCB doesn't send message to console			
22 23	Over voltage Under voltage	Main AC voltage input is too high Main AC voltage input is too low	L-P	L PWR	- LOW POWER

Error	Name	Description	Display messages		
			T801	**T802**	**T803**
40 41	Over acceleration Over acceleration	Treadmill accelerates too fast than normal. It happens when the speed is less than 8 Km/H. Fatal error. Stop using treadmill. Power circuit could be broken. Same as Error 40, but it happens at the beginning of workout.(D uring Start)	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill (Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select L Er (clear last error) and push Start to clear the error. Push Stop key, and you are in Stop mode. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not , when you test it ? Warning: Do not step on the treadmill, it is very dangerous.	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill (Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select CLEAR (clear last error) and push Start to clear the error. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not , when you test it ? Warning: Do not step on the treadmill, it is very dangerous.	Check when it happens. During workout (Speed 8Km/H to 14Km/H)? Or when they start the treadmill (Start)? Turn off and on the power. Push Stop + Slow together, and you are in setup mode. Push Stop + Fast together in setup mode, and you are in Diagnostic mode. Using fast, slow key to select "LAST ERROR : " (clear last error) and push Start to clear the error. Now you are ready to test the treadmill. Start the treadmill and check the Error message again. Error 1, Error 2, Error 4, Error 40, Error 41? Check the motor runs or not , when you test it ? Warning: Do not step on the treadmill, it is very dangerous.

(2) Console

Error	Name	Description
6	Memory	EEPROM of console error, EEPROM problem or circuit problem. Frequency is very low.
7	Version	Console CPU doesn't match controller CPU.
10	Communication	Console doesn't send message to MCB.

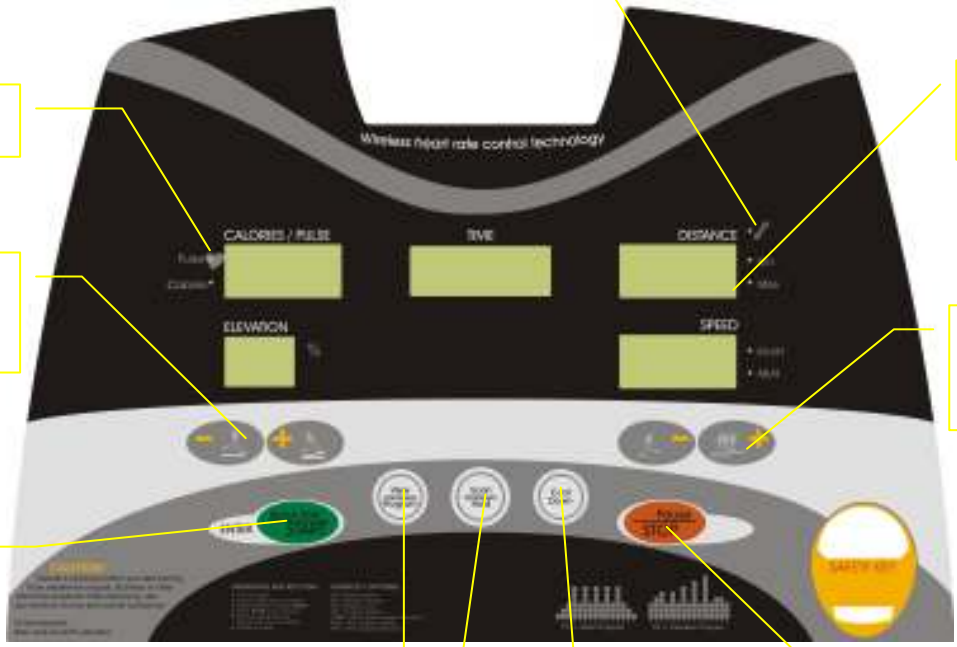
SECTION II

OPERATING CONSOLE

DISPLAY VALUES

Display	Resolution	Range	Increment
PULSE	XXX	40-240	1
ELEVATION (%)	XX.X	0.0-12.0	1%
DISTANCE (Miles)	XX.X	00.1 – 99.0	0.1
DISTANCE (Km)	XX.X	00.1 – 99.0	0.1
SPEED (Miles/H)	XX.X	00.6 – 10.0	0.1
SPEED (Km/H)	XX.X	01.0 – 16.0	0.1
TIME	XX:XX	00:01 – 99:00	00.01
CALORIES	XXX	1-999	1

FUNCTION KEYS



Service required indicator

Pulse indicator

LED display windows

Elevation adjustment buttons

Speed adjustment buttons

QUICK START, START or ENTER

PROGRAM select button
VIEW – selects pulse or calories display

PAUSE or STOP

COOL DOWN

SCAN / HOLD – display pulse or calories (HOLD) or display both interchangeably (SCAN)

SPEED ADJUSTMENTS
Speed + and Speed – will adjust speed by increments of 0.1Km/H during workout. Or you may hold these buttons to ramp up or down.

ELEVATION ADJUSTMENTS
For safety reasons, elevation is designed to be manually adjusted only. At no time will treadmill automatically adjust elevation except during one of the following three programs workout: P2 = elevation program, H-SE = HRC by speed and elevation, and H-E = HEC by elevation.

Elevation may be adjusted even while the running belt is not moving. However, during the program setup mode, elevation will not be adjustable.

PULSE FUNCTION
This treadmill features wireless heart rate monitoring, the most advanced technology to date for accurate read out of your heart beat.

To use the wireless pulse monitoring system, you must wear the heart rate transmitter chest strap so that the contact surface is next to your skin directly under your heart to pick up the pulse signals from your heart. There is a heart rate transmitter strap included with this treadmill.

Please note that some fibers used in clothes (e.g. polyester, polyamide) create static electricity which may prevent reliable heart rate measurement. Also note that mobile phone, television and other electrical appliances form an electro-magnetic field around them, which may also cause problems in heart rate measurement.

PAUSE FUNCTION
When STOP button is pressed during workout, program is suspended. After the running belt has come to a complete stop, display will count down from 03:00. During pause mode, only START and STOP buttons will function.

If START is pressed within three minutes during the pause mode, treadmill will bring the running belt movement back to the speed at which the treadmill was paused. Workout values will resume counting and continue where it was left off.

If STOP is pressed during the pause mode, program will end. After three minutes if no button is pressed, treadmill will automatically end the workout program.

END OF WORKOUT STATS
When you have completed your workout, the display windows will report your workout stats for one minute. After the running belt has come to a complete stop, the displays will show total time, total distance, total calories and average speed. Then the display will go to idle mode, ready for the next user workout setup. If you wish to skip the workout stats report, simply press the STOP button, which will skip display to the idle mode.

UNIT CONVERSION
To change from metric to English or English to metric, you must be in the idle mode. Follow the steps below to make the unit conversion.

1. Simultaneously press both the STOP and SPEED– buttons.

2. The message center will display UNIT
3. Simply press START to confirm.

VIEW / PROGRAM

During workout setup – this button will select program.

During workout – this button will change PULSE to CALORIES or CALORIES to PULSE.

SCAN / HOLD

This button will allow user to view calories and pulse display values interchangeably (SCAN).

User may also view calories or pulse only.

COOL DOWN

Whenever you are ready to stop your workout, even if you are in the middle of a program, be sure to use the COOL DOWN program. When the cool down button is pressed, it will automatically interrupt the current workout and go directly into cool down routine, which is programmed for four minutes. The first two minutes will reduce speed and elevation by 50% of your last display values. The last two minutes will reduce speed by another 50% and the elevation will reduce to 0%.

PRESET PROGRAMS

QUICK START

Once the power is turned on and the safety key is secured in place, simply press the QUICK START button. Treadmill will activate at 1.0 Km/H after 3 seconds. You may increase or decrease speed and elevation at any time during your workout. To end workout, simply press the STOP button to stop. During manual quick start workout, time will count up. During other program workouts, time will count down.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press START to begin workout

NOTE: Once the power is on and the safety tether key is secured in place, simply press the green start button, and a three second count down will activate and maintain the running mat at 1Km/H.

SPEED PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the program button to choose the pre-set speed program P1, press START key to activate the treadmill. Where user may customize, the default value (or the previous input value) will flash indicating that you may either confirm the value flashing or change the value. Once you have your data input, press START to activate the treadmill.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press the PROGRAM button once, P1 (speed program) will be displayed
4. Press ENTER to confirm
5. Use SPEED+ or SPEED– button to input workout time
6. Press ENTER to confirm
7. Use SPEED+ or SPEED– button to input intensity level based on maximum speed
8. Press START to begin workout

ELEVATION PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the program button twice to choose the pre-set elevation program P2. Where user may customize, the default value (or the previous input value) will flash indicating that you may either confirm the value flashing or change the value. Once you have your data input, press START to activate the treadmill.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press the program button twice, P2 (elevation program) will be displayed
4. Press ENTER to confirm
5. Use SPEED+ or SPEED– button to input workout time
6. Press ENTER to confirm
7. Use SPEED+ or SPEED– button to input intensity level based on maximum elevation
8. Press START to begin workout

TARGET TRAINING PROGRAMS

User has the option to customize workout based on setting training targets for time and distance. Once the power is on and the safety key is secured in place, you may press the program button to choose one of the target programs. P3 and P4 set training targets based on time and distance accordingly. Where user may customize, the default value (or the previous input value) will flash indicating that you may either confirm the value flashing or change the value. Once you have your data input, press START to activate the treadmill.

1. Turn power on
2. Check if safety key secured to treadmill and clip secured to user clothing
3. Press the PROGRAM button three times for P3 = Target time,
   or press the PROGRAM button four times for P4 = Target distance
4. Press ENTER to confirm
5. Use SPEED+ or SPEED– button to input target time or distance
6. Press START to begin workout

HEART RATE CONTROL PROGRAMS

User has the option to customize their heart rate control programs based on their target heart rate value. Once the power is turned on and the safety key is secured in place, you may press the PROGRAM button to select H-SE, H-S or H-E program. Where user may customize, the default value (or the previous input value) will flash indicating that you may either confirm or change the value flashing. Once you have your data input, press START to activate the treadmill.

Treadmill will automatically adjust by elevation, speed or both (depending on which program is chosen) to reach and maintain the user's target heart rate. During workout, user may still be able to adjust speed or elevation. Time will count down from total time, which is defined to be total time of workout and cool down.

At the end of workout, treadmill will automatically go into cool down mode. Default time is set for 4 minutes. In the first two minutes, speed and elevation will be reduced by 50%. The last two minutes, speed will be reduced by another 50% and elevation will go to 0%.

To work out in the heart rate control programs, user must wear wireless transmitter chest strap.

To determine your best target heart rate, please refer to the next section.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press PROGRAM button to select H-SE (HRC by speed and elevation adjustments), H-S (HRC by speed adjustment only) or H-E (HRC by elevation adjustment only).
4. Press ENTER to confirm
5. Use SPEED+ or SPEED– button to input your age
6. Press ENTER to confirm
7. Use SPEED+ or SPEED– button to input workout time
8. Press ENTER to confirm
9. Use SPEED+ or SPEED– button to input target heart rate
9. Press START to begin workout

CALCULATE YOUR TARGET HEART RATE

The most common method for calculating your target heart rate is to find your maximum heart rate first. The standard formula for maximum heart rate = 220 minus your age.

You DO NOT want to work out at your maximum heart rate. Instead you should work out in your target heart rate zone. Your target heart rate zone is a percentage of your maximum heart rate. The American Heart Association recommends working out at a target heart rate zone of between 60% - 75% of your maximum heart rate. If you are just beginning an exercise program, exercise near or below the lower limit of your target zone.

Lower limit of target zone = maximum heart rate x 0.60
Upper limit of target zone = maximum heart rate x 0.75

For example: User age 30

Max HR (maximum heart rate) = 220 – 30 = 190
60% of max HR = 190 x .60 = 114
75% of max HR = 190 x .75 = 142
(If you look up the chart to the right, you will note for age 30, your 60%-75% heart rate value is between 114 and 142.)

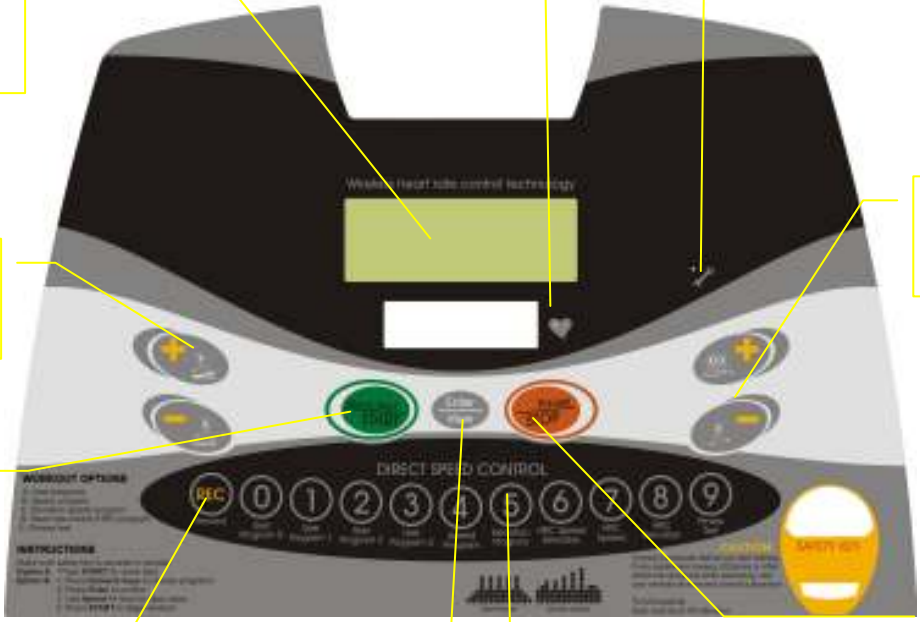
If you have not been exercising on a regular basis, it is recommended that you start slower. It may be advised that you use 114 to begin as your target heart rate. If you find it too difficult to maintain, go to a lower target heart rate. As you become stronger, you may want to increase your target heart rate.

TARGET HEART RATE

Age	Target Zone (60% - 75%)
20	120 - 150
25	117 - 146
30	**114 - 142**
35	111 - 138
40	108 - 135
45	105 - 131
50	102 - 127
55	99 - 123
60	96 - 120
65	93 - 116
70	90 - 113

DISPLAY VALUES

Display	Resolution	Range	Increment
PULSE	XXX	40-240	1
ELEVATION (%)	XX.X	0.0-12.0	1%
DISTANCE (Miles)	XX.X	00.1 – 99.0	0.1
DISTANCE (Km)	XX.X	00.1 – 99.0	0.1
SPEED (Miles/H)	XX.X	00.6 – 10.0	0.1
SPEED (Km/H)	XX.X	01.0 – 16.0	0.1
TIME	XX:XX	00:01 – 99:00	00.01
CALORIES	XXX	1-999	1



Pulse indicator

Service required indicator

Message center -
Extra large LED display

Speed adjustment buttons

Elevation adjustment buttons

QUICK START
or START

RECORD

PAUSE
or STOP

ENTER – to confirm selection or input
VIEW – selects viewing display during workout

PRESET PROGRAMS – during workout selection
0~9 NUMBERS – during workout setup
DIRECT SPEED CONTROL – during workout

SPEED ADJUSTMENTS

There are three ways to adjust speed during workout. SPEED+ and SPEED– will adjust speed by increment of 0.1Km/H. Or you may hold these buttons to ramp up or down. If the speed adjustment increment is large, it is easier to use the numeric buttons which function as direct speed control buttons during the workout. Another way to adjust speed is to press the extension-keys on the handle bar cover. Extension-keys SPEED+ and SPEED– will also adjust speed by increments of 0.1Km/H.

Example: to change from 3 Km/H to 8 Km/H, just press the number 8 button once. Also we could press and hold the SPEED+ button or extension-key SPEED+ until the speed display shows 8 Km/H.

ELEVATION ADJUSTMENTS

For safety reasons, elevation is designed to be manually adjusted only. At no time will treadmill automatically adjust elevation except during one of the following four programs: elevation program, HRC by elevation, HRC by elevation and speed, fitness test.

Elevation may be adjusted even while the running belt is not moving. However, during the program setup mode, elevation will not be adjustable.

There are two ways to adjust elevation during workout: GRADE+ and GRADE– on the console, extension-keys GRADE+ and GRADE– on the handle bar cover. The buttons will adjust elevation by increments of 1%.

PULSE FUNCTION

This treadmill features wireless heart rate monitoring, the most advanced technology to date for accurate read out of your heart beat.

To use the wireless pulse monitoring system, you must wear the heart rate transmitter chest strap so that the contact surface is next to your skin directly under your heart to pick up the pulse signals from your heart.

Please note that some fibers used in clothes (e.g. polyester, polyamide) create static electricity which may prevent reliable heart rate measurement. Also note that mobile phone, television and other electrical appliances form an electro-magnetic field around them, which may also cause problems in heart rate measurement.

PAUSE FUNCTION

When STOP button is pressed during workout, program is suspended. Message center will flash “PAUSE”. After the running belt has come to a complete stop, dot matrix display window will count down from 3:00. During pause mode, only START and STOP buttons will function.

If START is pressed within three minutes during the pause mode, treadmill will bring the running belt movement back to the speed at which the treadmill was paused. Workout values will resume counting and continue where it was left off.

If STOP is pressed during the pause mode, program will end. After three minutes if no button is pressed, treadmill will automatically end the workout program.

END OF WORKOUT STATS

When you have completed your workout or if you have ended your workout, message center will display twice the

following stats: total time, total distance, total calories, average speed and average pulse. Then the display will go to idle mode and ready for the next user workout setup. If you wish to skip the workout stats report, simply press the STOP button, which will skip display to the idle mode. Idle mode will display PICK PROG OR PRESS START.

UNIT CONVERSION

To change from metric to English or English to metric, you must be in the idle mode, where the display shows "PICK PROG OR PRESS START". Follow the steps below to make the unit conversion.

1. Simultaneously press both the STOP and SPEED– buttons.
2. The message center will display Km to Mi or Mi to Km.
3. Simply press START to confirm.

Once you have begun workout, the speed unit will have changed the measurement unit accordingly.

PRESET PROGRAMS

QUICK START

Once the power is turned on and the safety key is secured in place, simply press the quick start button. Treadmill will activate at 1.0 Km/H after 3 seconds. You may increase or decrease speed or elevation at any time during your workout. To end workout, simply press the STOP button. During workout, time will count up.

1. Turn power on
2. Check if safety key secured to treadmill and clip secured to user clothing
3. Press START to begin workout

NOTE: Once the power is on and the safety tether key is secured in place, simply press the green START button, and a three second count down will activate and maintain the running mat at 1Km/H.

CUSTOM PROGRAMS

At the end of any workout, except heart rate control programs and the fitness test, you have the option to save your workout routine to any one of the four locations marked as USER PROGRAM. At the end of the workout, the message center will flash "SAVE". While it is still flashing, press REC and one of the four buttons from 0 to 3. When REC is pressed, "REC" will show up on the display and your button number will show up. Once REC # (0~3) display changed into PROG # (0~3), it means that the program is saved.

To recall the program, press button USER PROGRAM 0~3, ENTER to confirm and press START to activate program. Treadmill has no default recorded in the custom programs. You must save your program first before you may recall.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press numeric buttons 0 to 3 to select custom program
4. Display will show program selected
5. Press ENTER to confirm
6. Press START to begin workout

SPEED PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the numeric button 4 to choose the pre-set speed program. Message center will prompt user to set up workout duration, and intensity level based on max speed value. Once you have made your selection, press START key to activate the treadmill.

During workout, treadmill will automatically adjust speed according to pre-set program setting. User may still be able to adjust speed if the preset is not appropriate. The entire remaining program will scale up or down accordingly. During workout, user may adjust elevation level at will. To end workout, simply press the STOP button to stop the treadmill. During workout, time counts down from target workout time.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 4 for SPEED program
4. Display will show “SPD P” for speed program
5. Press ENTER to confirm
6. Use numeric buttons to input workout duration. Default value will flash. You may change or confirm value.
7. Press ENTER to confirm
8. Use numeric buttons to input intensity level based on maximum speed. Default value will flash. You may change or confirm value.
9. Press ENTER to confirm
10. Press START to begin workout

ELEVATION PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the numeric button 5 to choose the pre-set elevation program. Message center will prompt user to set up workout duration and intensity level based on max elevation value. Once you have made your selection, press START key to activate the treadmill.

During workout, treadmill will automatically adjust elevation according to pre-set program setting. User may still be able to adjust elevation if the preset is not appropriate. The entire remaining program will scale up or down accordingly. During workout, user may adjust speed level at will. To end workout, simply press the STOP button. During workout, time counts down from target workout time.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 5 for elevation program
4. Display will show “GRD P” for grade (elevation) program
5. Press ENTER to confirm
6. Use numeric buttons to input workout duration. Default value will flash. You may change or confirm value.
7. Press ENTER to confirm
8. Use numeric buttons to input intensity level based on maximum elevation. Default value will flash. You may change or confirm value.
9. Press ENTER to confirm
10. Press START to begin workout

HEART RATE CONTROL PROGRAMS

User has the option to customize their heart rate control programs based on their target heart rate value. Once the power is turned on and the safety key is secured in place, you may press the numeric button 6 to select HRC Speed/Elevation program or number 7 to select HRC Speed program or numeric button 8 to select HRC Elevation program. Message center will prompt user to set up workout step by step. Once you have made your selection, press START button to activate treadmill.

User also has the option to set up their warm up speed and warm up time. During warm up, target heart rate training function will not be in operation.

After the warm up session, treadmill will automatically adjust by elevation or speed (depending on which program is chosen) to bring the user to the target heart rate. During workout, user may still be able to adjust speed or elevation. During workout, time counts down from total time, which is defined to be time of workout plus warm up and cool down.

At the end of the workout time, treadmill will automatically go into cool down mode. Cool down is pre-set for 4 minutes. In the first two minutes, speed and elevation will be reduced by 50%. The last two minutes, speed will be reduced by another 50% while the elevation will go to 0%.

To use the heart rate control programs, user must wear wireless transmitter chest strap. Signals from contact heart rate sensor will be off in heart rate control programs.

To determine your best target heart rate, please refer to the section on calculate your target heart rate.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 6 to select HRC Speed/Grade program, or press 7 to select HRC Speed program, or press 8 to select HRC Elevation program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input your age
7. Press ENTER to confirm
8. Use numeric buttons to input workout time
9. Press ENTER to confirm
10. Use numeric buttons to input target heart rate
11. Press ENTER to confirm
12. Use numeric buttons to input warm up time=5
13. Press ENTER to confirm
14. Use numeric buttons to input warm up speed=2
15. Press ENTER to confirm
16. Press START to begin workout

CALCULATE YOUR TARGET HEART RATE

The most common method for calculating your target heart rate is to find your maximum heart rate first. The standard formula for maximum heart rate = 220 minus your age.

You DO NOT want to work out at your maximum heart rate. Instead you should work out in your target heart rate zone. Your target heart rate zone is a percentage of your maximum heart rate. The American Heart Association recommends working out at a target heart rate zone of between 60% - 75% of your maximum heart rate. If you are just beginning an exercise program, exercise near or below the lower limit of your target zone.

TARGET HEART RATE

Lower limit of target zone = maximum heart rate x 0.60
Upper limit of target zone = maximum heart rate x 0.75

For example: User age 30

Max HR (maximum heart rate) = 220 – 30 = 190
60% of max HR = 190 x .60 = 114
75% of max HR = 190 x .75 = 142
(If you look up the chart to the right, you will note for age 30, your 60%-75% heart rate value is between 114 and 142.)

If you have not been exercising on a regular basis, it is recommended that you start slower. It may be advised that you use 114 to begin as your target heart rate. If you find it too difficult to maintain, go to a lower target heart rate. As you become stronger, you may want to increase your target heart rate.

Age	Target Zone (60% - 75%)
21	120 - 150
25	117 - 146
30	**114 - 142**
35	111 - 138
40	108 - 135
45	105 - 131
50	102 - 127
55	99 - 123
60	96 - 120
65	93 - 116
70	90 - 113

FITNESS TEST PROGRAM

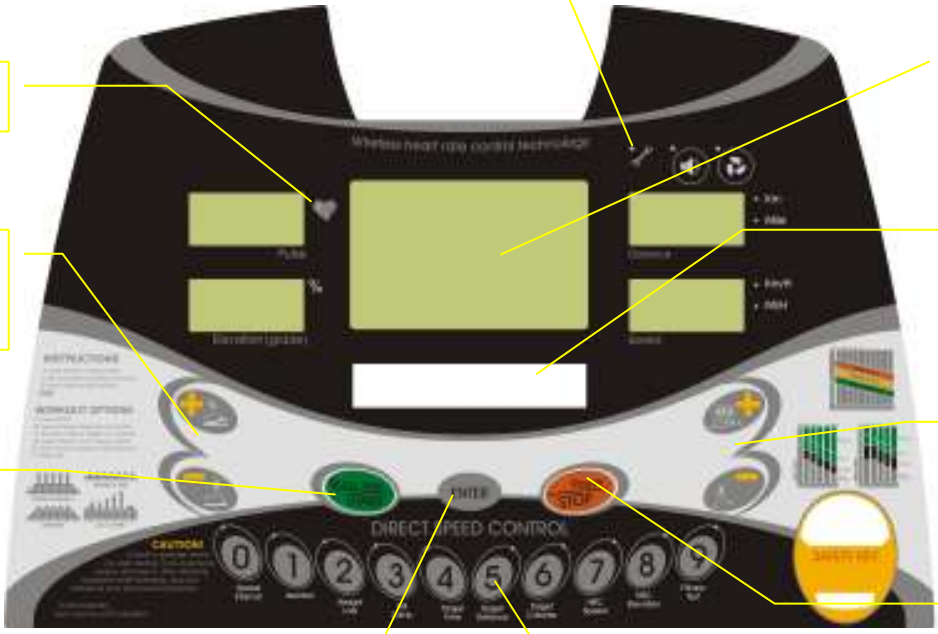
Fitness test is a motivational program designed to determine user's physical fitness level.
During workout, user will not be able to adjust speed or elevation. The program will increase workout intensity level. And based on the actual heart rate picked up from the transmitter and the age user input, the treadmill computer will be able to assess user's physical fit level.

To use the fitness test program, user must wear the wireless transmitter chest strap. If treadmill does not pick up the transmitter heart rate signal, this program will not function.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 9 to select fitness test program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input your age
7. Press ENTER to confirm
8. Press START to begin workout

DISPLAY VALUES

Display	Resolution	Range	Increment
PULSE	XXX	40-240	1
ELEVATION (%)	XX.X	0.0-15.0	1%
DISTANCE (Miles)	XX.X	00.1 – 99.0	0.1
DISTANCE (Km)	XX.X	00.1 – 99.0	0.1
SPEED (Miles/H)	XX.X	00.5 – 11.0	0.1
SPEED (Km/H)	XX.X	01.0 – 18.0	0.1
TIME	XX:XX	00:01 – 99:00	00.01
CALORIES	XXX	1-999	1



Service required indicator

Pulse indicator

LED dot matrix display window

Elevation adjustment buttons

LCM with backlight message center

QUICK START or START

Speed adjustment buttons

PAUSE or STOP

ENTER - to confirm selection or input

PRESET PROGRAMS - during workout selection
0~9 NUMBERS – during workout
DIRECT SPEED CONTROL – during workout

SPEED ADJUSTMENTS

There are three ways to adjust speed during workout. SPEED+ and SPEED– will adjust speed by increments of 0.1Km/H. Or you may hold these buttons to ramp up or down. If the speed adjustment increment is large, it is easier to use the numeric buttons which function as direct speed control during workout. Another way to adjust speed is to press the extension-keys on the handle bar cover. Extension-key SPEED+ and SPEED– will also adjust speed by increments of 0.1Km/H.

Example: to change from 3 Km/H to 8 Km/H, just press the number 8 button once. Also we could press and hold the SPEED+ button or extension-key SPEED+ until the speed display shows 8 Km/H.

ELEVATION ADJUSTMENTS

For safety reasons, elevation is designed to be manually adjusted only. At no time will treadmill automatically adjust elevation except during one of the following four program workout: ELEVATION, HRC BY ELEVATION, FITNESS TEST.

Elevation may be adjusted even while the running belt is not moving. However, during the program setup mode, elevation will not be adjustable.

There are two ways to adjust elevation during workout: GRADE+ and GRADE– on the console, extension-key GRADE+ and GRADE– on the handle bar cover. The buttons will adjust elevation by increments of 1%.

PULSE FUNCTION

This treadmill features wireless heart rate monitoring, the most advanced technology to date for accurate read out of your heart beat.

To use the wireless pulse monitoring system, you must wear the heart rate transmitter chest strap so that the contact surface is next to your skin directly under your heart to pick up the pulse signals from your heart. There is a heart rate transmitter strap included with this treadmill.

Please note that some fibers used in clothes (e.g. polyester, polyamide) create static electricity which may prevent reliable heart rate measurement. Also note that mobile phone, television and other electrical appliances form an electro-magnetic field around them, which may also cause problems in heart rate measurement.

PAUSE FUNCTION

When STOP button is pressed during workout, program is suspended. Message center will flash “WORKOUT PAUSED”. After the running belt has come to a complete stop, dot matrix display window will count down from 3:00. During pause mode, only START and STOP buttons will function.

If START is pressed within three minutes during the pause mode, treadmill will bring the running belt movement back to the speed at which the treadmill was paused. Workout values will resume counting and continue where it was left off.

If STOP is pressed during the pause mode, program will end. After three minutes if no button is pressed, treadmill will automatically end the workout program.

END OF WORKOUT STATS

When you have completed your workout, the display will report your workout stats. After the running belt has come to a complete stop, the message center will display total time, total distance, total calories and average speed twice. Then

the display will go to idle mode, ready for the next user workout setup. If you wish to skip the workout stats report, simply press the STOP button, which will skip display to the idle mode.

UNIT CONVERSION

To change from metric to English or English to metric, you must be in the idle mode, where the dot matrix window displays a flashing heart. Follow the steps below to make the unit conversion.

1. Simultaneously press both the STOP and SPEED– buttons.
2. The message center will display Km to Mi or Mi to Km.
3. Simply press START to confirm.

Notice that the LED light next to the distance display window on the upper right corner will have changed the measurement unit accordingly.

PRESET PROGRAMS

QUICK START

Once the power is turned on and the safety key is secured in place, simply press the green quick start button. Treadmill will activate at 1.0 Km/H. You may increase or decrease speed or elevation at any time during your workout. To end workout, simply press the red STOP button. During workout, time will count up.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press START to begin workout

NOTE: Once the power is on and the safety tether key is secured in place, simply press the green START button, and a three-second count down will activate and maintain the running mat at 1Km/H.

SPEED PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the numeric button 0 or 1 to choose one of the two pre-set speed programs, SPEED INTERVAL or AEROBIC. Message center will prompt user to set up workout duration, and intensity level based on max speed value. Once you have made your selection, press START key to activate the treadmill.

During workout, treadmill will automatically adjust speed according to pre-set program settings. User may still be able to adjust speed if the preset is not appropriate. The entire remaining program will scale up or down accordingly. During workout, user may adjust elevation level at will. To end workout, simply press the red STOP button. During workout, time counts down from target workout time.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 0 for SPEED INTERVAL program or press 1 for AEROBIC program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input workout duration
7. Press ENTER to confirm

8. Use numeric buttons to input intensity level based on maximum speed
9. Press ENTER to confirm
10. Press START to begin workout

ELEVATION PROGRAMS

Once the power is turned on and the safety key is secured in place, you may press the numeric buttons 2 or 3 to choose one of the two pre-set elevation programs, WEIGHT LOSS or HILL CLIMB. Message center will prompt user to set up workout duration, and intensity level based on max elevation value. Once you have made your selection, press START to activate the treadmill.

During workout, treadmill will automatically adjust elevation according to pre-set program setting. User may still be able to adjust elevation if the preset is not appropriate. The entire remaining program will scale up or down accordingly. During workout, user may adjust speed level at will. To end workout, simply press the red stop button. During workout, time counts down from target workout time.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 2 for WEIGHT LOSS program or press 3 for HILL CLIMB program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input workout duration
7. Press ENTER to confirm
8. Use numeric buttons to input intensity level based on maximum elevation
9. Press ENTER to confirm
10. Press START to begin workout

TARGET TRAINING PROGRAMS

Users have the option to customize workout based on setting training targets for time, distance or calories. Once the power is turned on and the safety key is secured in place, you may press the numeric button 4 to set training target based on time, 5 to set training target based on distance or 6 to set training target based on calories. Message center will prompt user to set up workout target value. Once you have made your selection, press START key to activate the treadmill.

During workout, user may adjust speed and/or elevation at will. To end workout, simply press the red stop button to stop the treadmill. During workout, target training value will be displayed on the dot matrix display window.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 9 to select fitness test program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input training target value
7. Press ENTER to confirm
8. Press START to begin workout

HEART RATE CONTROL PROGRAMS

User has the option to customize their heart rate control programs based on their target heart rate value. Once the power is on and the safety key is secured in place, you may press the numeric button 7 to select HRC program adjust by speed or numeric button 8 to select HRC program adjust by elevation. Message center will prompt user to set up workout step by step. Once you have made your selection, press START button to activate the treadmill.

User also has the option to set up their warm up speed and warm up time. During warm up mode, target heart rate training function will not be in operation.

After the warm up mode, treadmill will automatically adjust by elevation or speed (depending on which program is chosen) to reach and maintain the user's target heart rate. During workout mode, users may still be able to adjust speed or elevation. During workout, time counts down from total time, which is defined to be time of warm up plus workout and cool down.

At the end of the workout time, treadmill will automatically go into cool down mode. Cool down mode is pre-set up for 4 minutes. In the first two minutes, speed and elevation will be reduced by 50%. The last two minutes, speed and elevation will be reduced by another 50%. To end workout, simply press the red STOP button to stop the treadmill.

To use the heart rate control programs, users must wear wireless transmitter chest strap. Signals from contact heart rate sensor will not be used to maintain your target heart rate.

To determine your best target heart rate, please refer to the section on calculate your target heart rate.

1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 7 to select HRC program adjust by speed changes or press 8 to select HRC program adjust by elevation changes
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input your age
7. Press ENTER to confirm
8. Use numeric buttons to input workout time
9. Press ENTER to confirm
10. Use numeric buttons to input target heart rate
11. Press ENTER to confirm
12. Use numeric buttons to input warm up time
13. Press ENTER to confirm
14. Use numeric buttons to input warm up speed
15. Press ENTER to confirm
16. Press START to begin workout

CALCULATE YOUR TARGET HEART RATE

The most common method for calculating your target heart rate is to find your maximum heart rate first. The standard formula for maximum heart rate = 220 minus your age.

You DO NOT want to work out at your maximum heart rate. Instead you work out in your target heart rate zone. Your target heart rate zone is a percentage of your maximum heart rate. The American Heart Association recommends working out at a target heart rate zone of between 60% - 75% of your maximum heart rate. If you are just beginning an exercise program, exercise near or below the lower limit of your target zone.

Lower limit of target zone = maximum heart rate x 0.60
Upper limit of target zone = maximum heart rate x 0.75

For example: User age 30

Max HR (maximum heart rate) = 220 – 30 = 190
60% of max HR = 190 x .60 = 114
75% of max HR = 190 x .75 = 142
(If you look at the chart to the right, you will note for age 30, your 60%-75% heart rate values are 114 and 142.)

If you have not been exercising on a regular basis, it is recommended that you start slower. It may be advised that you use 114 to begin as your target heart rate. If you find it too difficult to maintain, go to a lower target heart rate. As you become stronger, you may want to increase your target heart rate.

TARGET HEART RATE

Age	Target Zone (60% - 75%)
22	120 - 150
25	117 - 146
30	**114 - 142**
35	111 - 138
40	108 - 135
45	105 - 131
50	102 - 127
55	99 - 123
60	96 - 120
65	93 - 116
70	90 - 113

FITNESS TEST PROGRAM

Fitness test is a motivational program designed to determine user's physical fitness level.
During workout, user will not be able to adjust speed or elevation. The program will increase workout intensity level. And based on the actual heart rate picked up from the transmitter and the age user input, the treadmill computer will be able to assess user's physical fit level.

To use the fitness test program, user must wear the wireless transmitter chest strap. If treadmill does not pick up the transmitter heart rate signal, this program will not function.

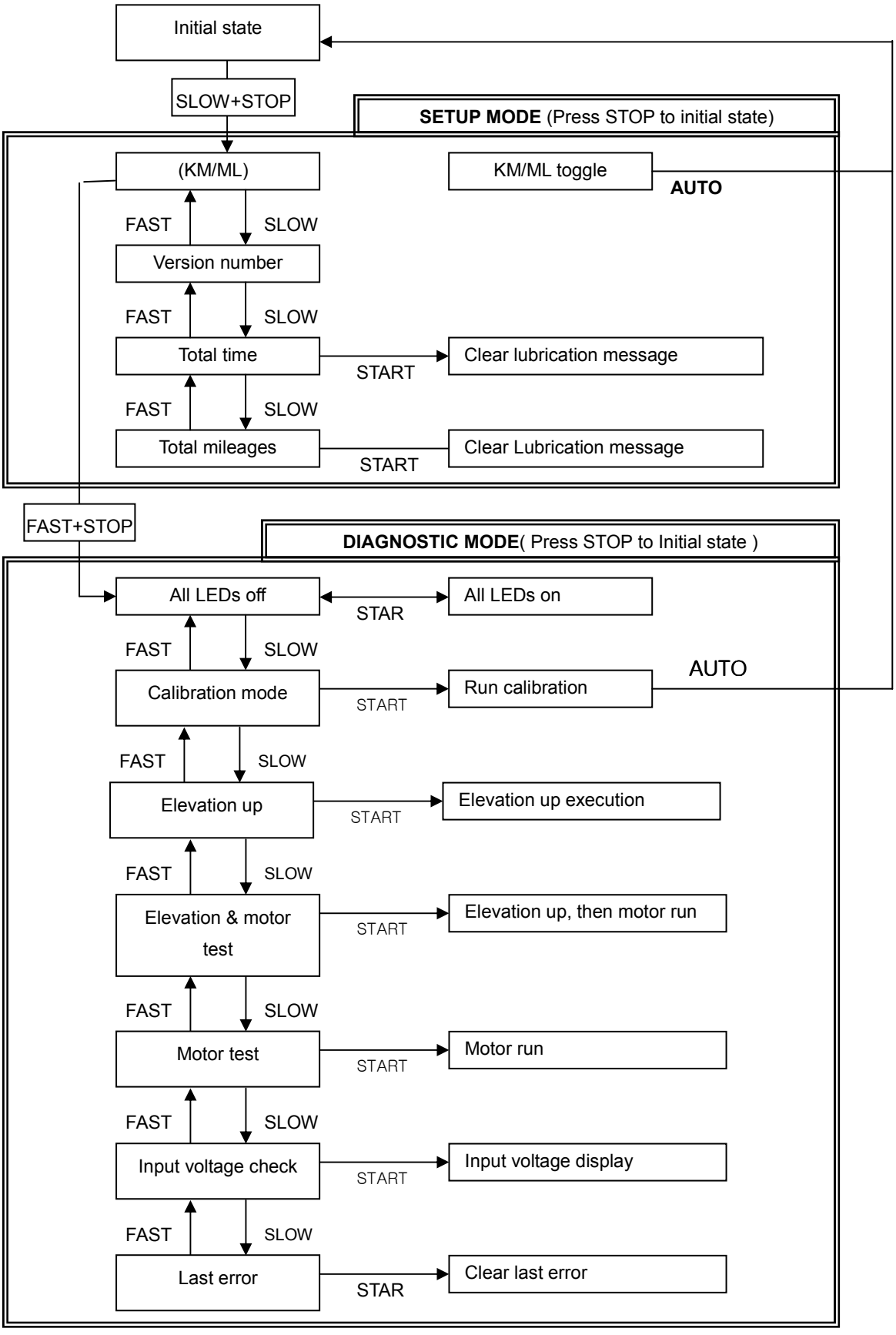
1. Turn power on
2. Check safety key secured to treadmill and clip secured to user clothing
3. Press 9 to select fitness test program
4. Display will show program selected
5. Press ENTER to confirm
6. Use numeric buttons to input your age
7. Press ENTER to confirm
8. Press START to begin workout

SETUP AND DIAGNOSTIC MODE

T801 T802 T803 CONSOLE

Remark: FAST = SPEED +

SLOW=SPEED -



SECTION III

HOW TO …
SERVICE AND REPAIR GUIDE

HS Consumer Treadmill

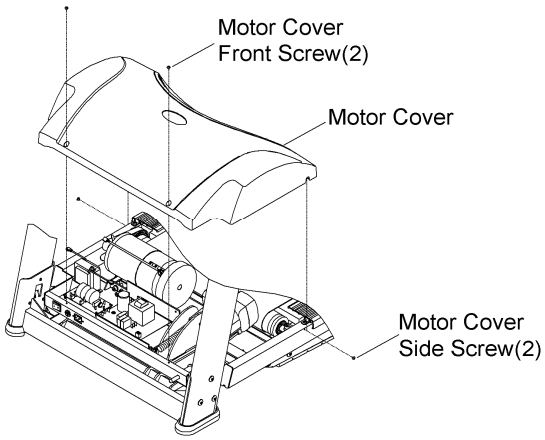
How To… Replace The Running Belt and Deck

Tools Required: Allen key set, Phillips screwdriver, tape measure, rubber hammer, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

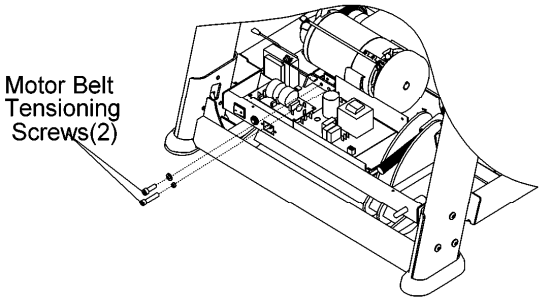
REMOVAL AND INSTALLATION

1 At the power switch, turn off the unit, and then unplug the power cord at the wall outlet.

2 Remove the motor cover front screws(2), side screws(2) of the motor cover, lift off the motor cover.

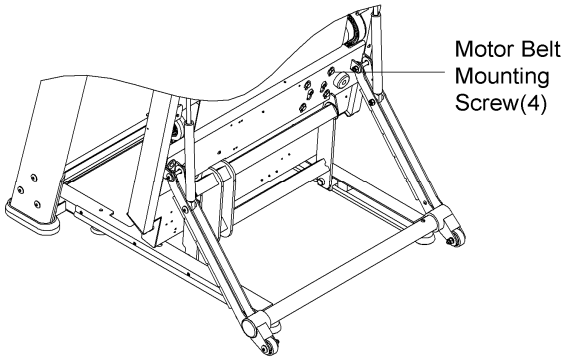


3 Loosen the motor belt tensioning screws(2). Fold the treadmill, loosen the four mounting screws(4) securing the motor to the bottom of the frame.
NOTE: to remove front roller easily, release motor belt via loosen motor belt tensioning screws(2) and the four mounting screws(4).

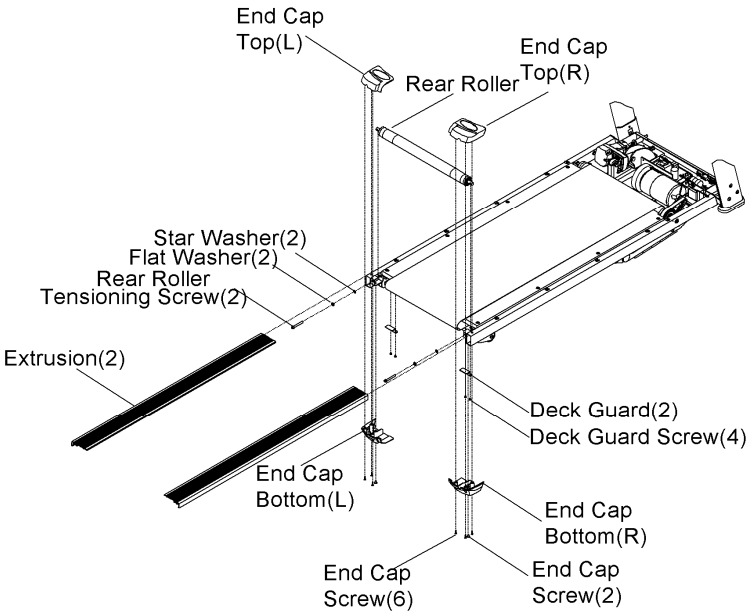


4 Remove the end caps by removing end cap screws(6) and end cap screws(2) from each end cap.

5 Remove the deck guards(2) by removing deck guard screws(4) and set aside to be remounted on the new deck.



6 Remove the gas shocks by removing gas shock nuts(4) , screws(2) , flat washers(4) and sleeves(4) from each other.
For T803, first remove the gas shocks then remove the back cover screws(18) and screws(4) of the back cover, lift off the back cover.
CAUTION: for safety reasons, remove gas shocks to avoid injury when lifting off the deck. Without the weight of deck, gas shocks will spring up and create safety concern.



How To… Replace The Running Belt and Deck - Continued

Tools Required: Allen key set, Phillips screwdriver, tape measure, rubber hammer, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION – Continued

7 Unfold the treadmill. Remove the rear roller tensioning screws(2), flat washers(2) and star washers(2). Slide each extrusion back.

8 Remove the rear roller.

9 Remove the curve washers(1), front roller screw(1) and screw(1) from the front roller mounting brackets and main frame, then lift the front roller out from the running belt. If necessary, remove the motor drive belt.

10 Remove the deck screws(8) and flat washer(8) then lift out the deck.

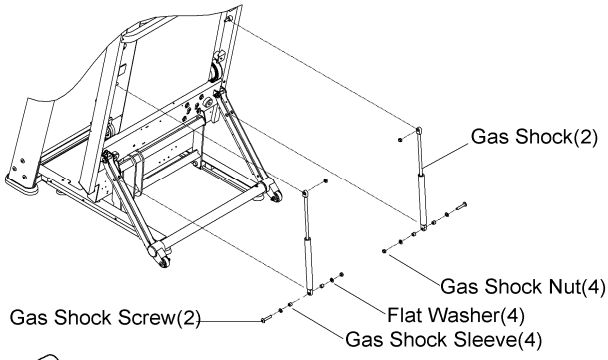
11 Remove the running belt and discard.

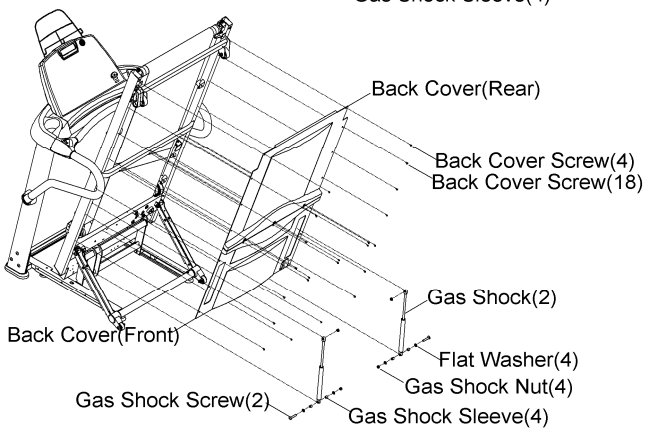
12 Install new running belt and deck in reverse order. Make sure to reinstall deck guards on the new deck. Retension the motor drive belt to 85~95 lbs. Do not overtighten belt.

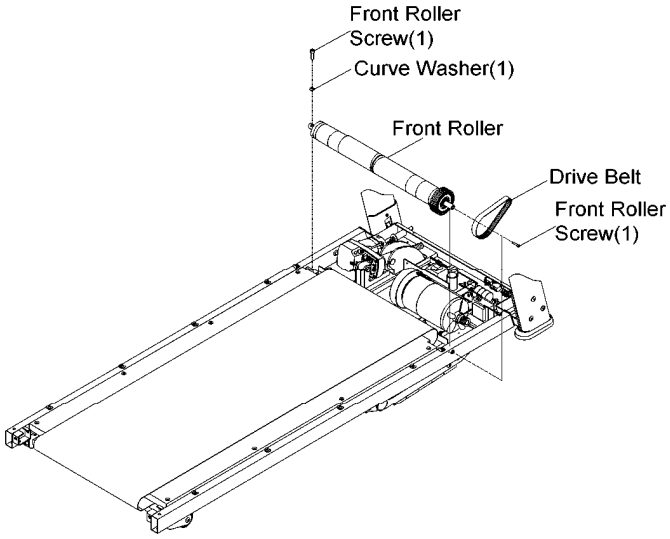
NOTE: when adjusting motor belt tension, the four mounting screws should be loosen, and then adjust motor belt tensioning screws(2) to make sure the motor drive belt to 85~95lbs.

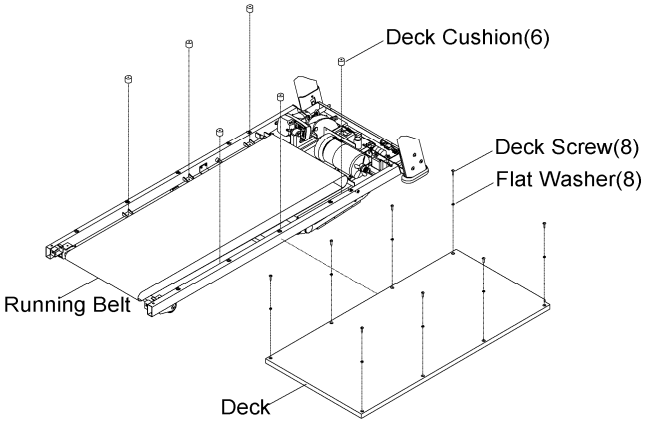
13 Proceed to the following page for proper belt stretching and belt tracking adjustment.

14 Install the deck and running belt in reverse order







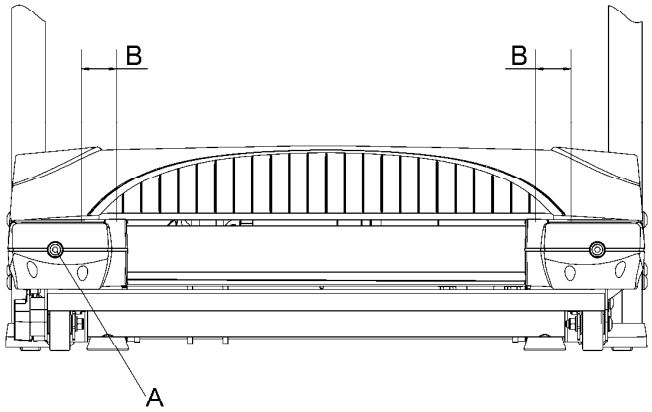


Section III

HS Consumer Treadmill
How To… Adjust Running Belt Tracking

Tools Required: Allen key set. (All fasteners are metric. Make sure that you have metric tools.)

1. After the treadmill has been installed and leveled, the belt must be checked for confirm proper tracking. First, plug the power cord into an appropriate outlet and turn the treadmill power ON.



2. Press the QUICK START button then increase speed to 8.0kph by pressing the SPEED+ button.

3. If the running belt has moved to the **RIGHT**, turn the RIGHT tension bolt 1/4 turn CLOCKWISE and the left tension bolt 1/4 turn counterclockwise to start the running belt tracking back to the center of the rear roller. If the running belt has moved to the **LEFT**, turn the left tension bolt 1/4 turn CLOCKWISE and the right tension bolt 1/4 turn counterclockwise to start the running belt tracking back to the center of the rear roller.

4. Repeat this adjustment until the running belt appears centered. The belt should be equal distance (B) on both sides of the rear roller.

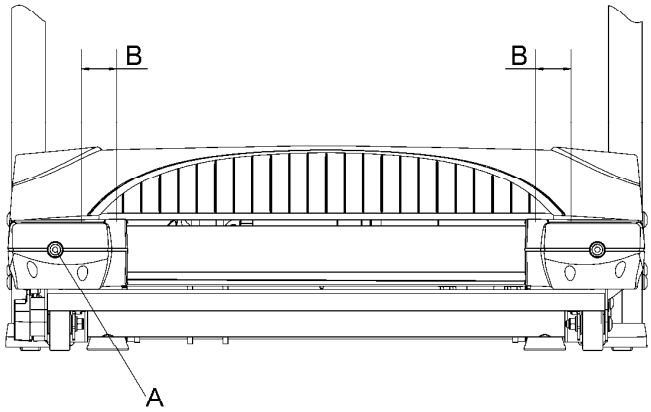
5. Allow the unit to operate for several minutes to see if the belt remains centered.

NOTE: During the adjustment above, DO NOT exceed one full turn of the adjusting screws in either direction.

How To… Adjust Running Belt Tension

Tools Required: Allen key set. (All fasteners are metric. Make sure that you have metric tools.)

1. Locate the two belt tensioning bolts on each side of the rear roller mounting bracket. The tensioning bolts are accessible from the holes provided in the rear roller guards.



2. Enter the manual program and adjust the belt alignment by running unit for five minutes at 8.0 kph. **DO NOT** run on the **BELT**.

3. Speed up to 16kph and check if the belt centers the treadmill.

4. Using the SPEED- button to slow down to 1kph. With the running belt speed at 2 mph (3.2 kph), begin walking on the treadmill. Tightly grasp the handlebars and attempt to stall the running belt. If the running belt slips, continue step until it's not slippy.

5. Stop the treadmill and alternately turn the running belt tensioning bolts (A) 1/4 turn clockwise to tension (See **How To… Adjust Running Belt Tracking** on previous page). Repeat Step 3 and Step 4 until slipping is eliminated. **DO NOT EXCEED ONE FULL TURN!**

HS Consumer Treadmill

How To…Replace The Motor Drive Belt

Tools Required: Allen key set**,** Phillips screwdriver, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. At the power switch, turn off the unit and unplug the power cord at the wall outlet.

2. Remove the motor cover front screws(2), side screws(2) of the motor cover, lift off the motor cover.

3. Loosen the motor belt tensioning screws(2), Fold the treadmill, loosen the four mounting screws(4) securing the motor to the bottom of the frame.
NOTE: To remove front roller easily, release motor belt via loosen motor belt tensioning screws(2) and the four mounting screws.

4. Unfold the treadmill. Move the motor mounting plate in the slotted holes towards the rear roller to relieve belt tension. Remove the motor drive belt from the end of the motor drive pulley.

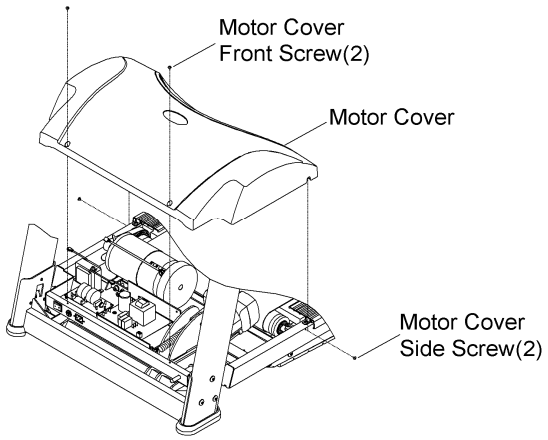
5. Loosen the rear roller tensioning bolts

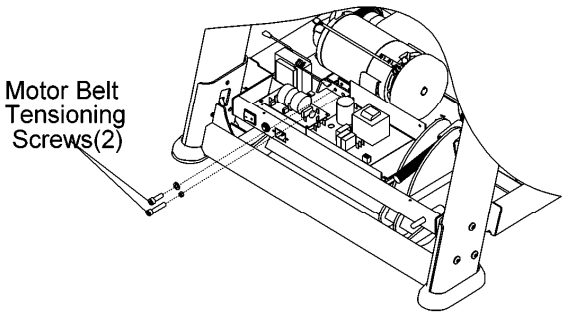
6. Remove the curve washers(1), front roller screw(1) and screw(1) from the front roller mounting brackets and main frame.

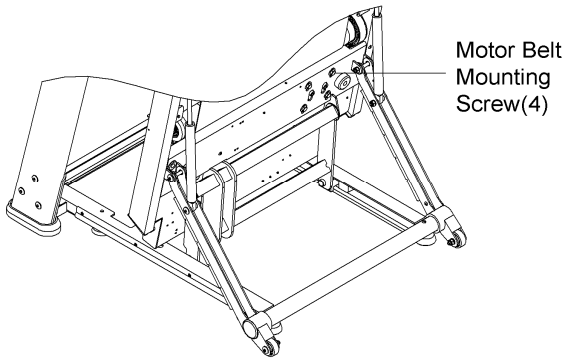
7. Lift the front roller out of its frame mount, slip off the motor drive belt from the pulley, and discard the belt.

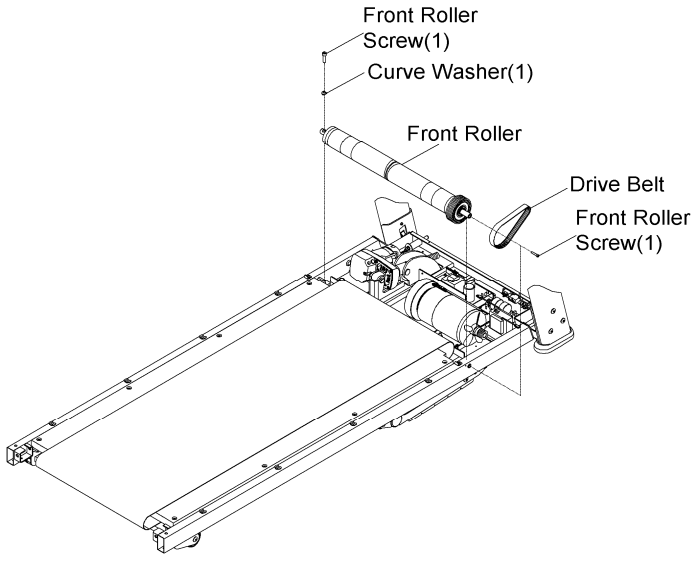
8. Install new motor drive belt in reverse order. Tension the belt to 85~95 lbs.(See section 3 page 3)

9. Re-tension the running belt and reset its tracking. Refer back to running belt tension and tracking procedure in this section.









How To…Replace The Drive Motor

Tools Required: Allen key set**,** Phillips screwdriver, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. At the power switch, turn off the unit, then unplug the power cord at the wall outlet.

2. Remove the motor cover front screws(2),side screws(2) of the motor cover, lift off the motor cover.

3. Remove the speed sensor cable by removing speed sensor screws(2), washers(2) and star washer(1) Set the speed sensor cable aside to be remounted on the new motor.

4. Disconnect all connectors from the motor (Please refer to WIRING DIAGRAM – Section IV, page 9).

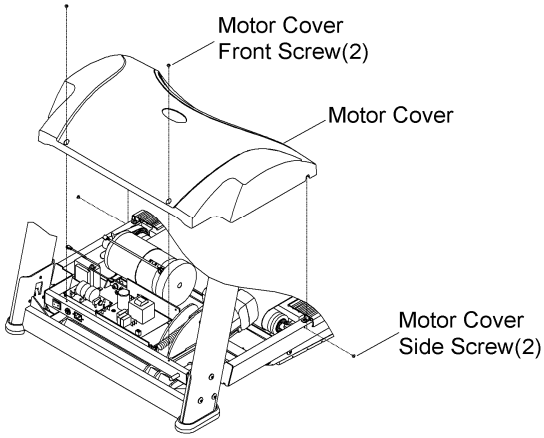
5. Fold the treadmill. Remove the motor belt tensioning screws(2), Remove the four motor mounting screws.
NOTE: two people are needed in this process. One has to hold the motor in case it drops on the floor

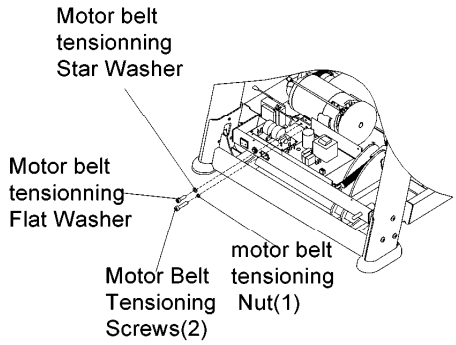
6. Unfold the treadmill. Move the motor mounting plate towards the rear roller to relieve belt tension. Remove the drive motor belt off the end of the pulley.

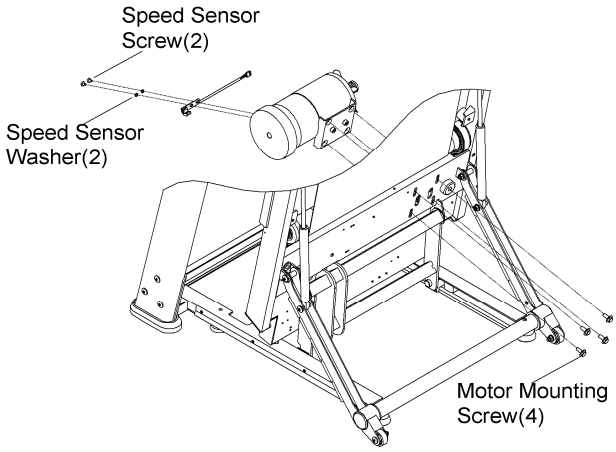
7. Lift out the motor.

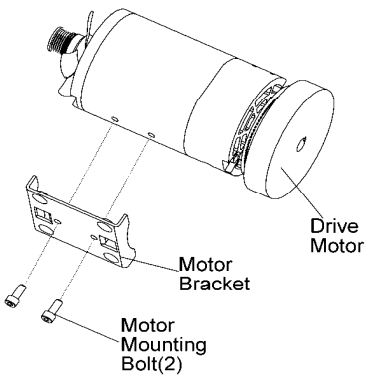
8. Remove the motor mounting screws(2) and discard the motor. Set the motor bracket aside to be remounted on the new motor.

10. Install new drive motor in reverse order and make sure to properly adjust the motor drive belt (85~95 lbs) (See section 3 page 3) and running belt. (See **How To… Replace The Running Belt and Deck**)









Section III

HS Consumer Treadmill

How To…Replace The Front Roller

Tools Required: Allen key set**,** Phillips screwdriver, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. At the power switch, turn off the unit then unplug the power cord at the wall outlet.

2. Remove the motor cover front screws(2), side screws(2) of the motor cover, lift off the motor cover.

3. Loosen the rear roller tensioning bolts to slacken the running belt.

4. Loosen the motor belt tensioning screws(2). Fold the treadmill, loosen the four motor mounting screws.

NOTE: To remove front roller easily, release motor belt via loosen motor belt tensioning screws (2) and the four mounting screws.

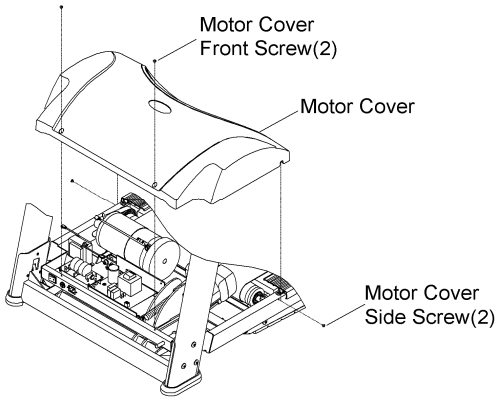
5. Remove the end caps by removing end cap screws(6) from each end cap.

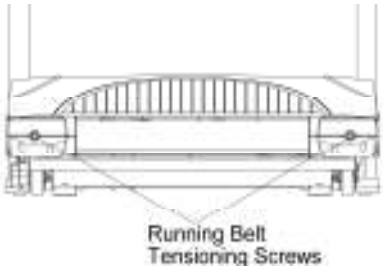
6. Unfold the treadmill. Slide each extrusion back.

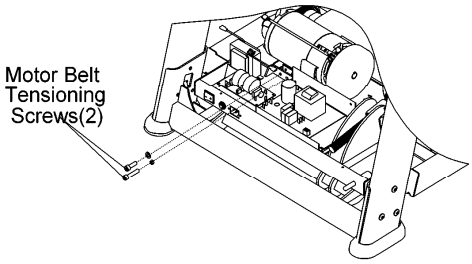
7. Move the motor mounting plate towards the rear roller to relieve belt tension. Remove the curve washers(1), front roller screw(1) and screw(1) from the front roller mounting brackets and main frame.

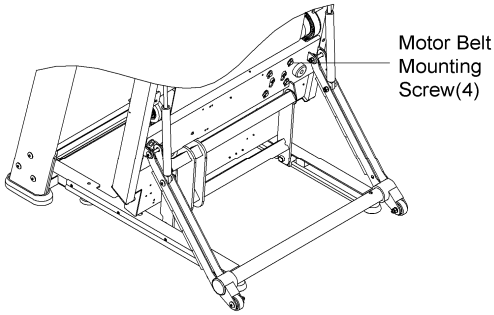
8. Lift out the front roller from the running belt and remove the motor drive belt.

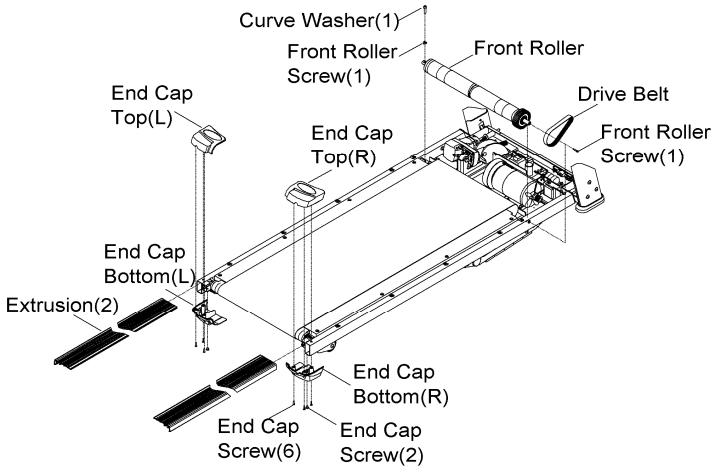
9. Install new front roller in reverse order and make sure to properly adjust the motor drive belt (85~95 lbs.) (See section 3 page 3) and running belt. (See **How To… Replace The Running Belt and Deck**.)







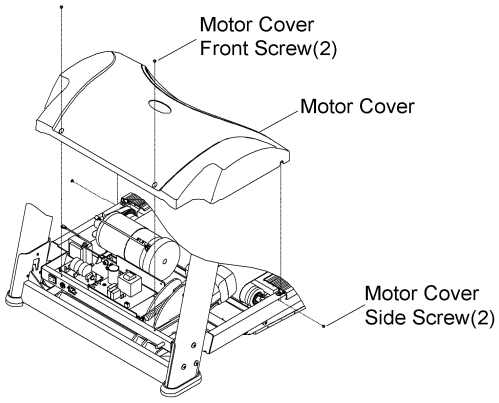




How To…Replace The Rear Roller

Tools Required: Allen key set**,** Phillips screwdriver, rubber hammer, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION



1. At the power switch, turn off the unit, then unplug the power cord at the wall outlet.

2. Remove the motor cover front screws(2),side screws(2) of the motor cover, lift off the motor cover.

NOTE: In order to lift rear roller out, extrusions need to be moved out of the way. Motor cover has to be removed to get enough space for sliding the extrusions forward.

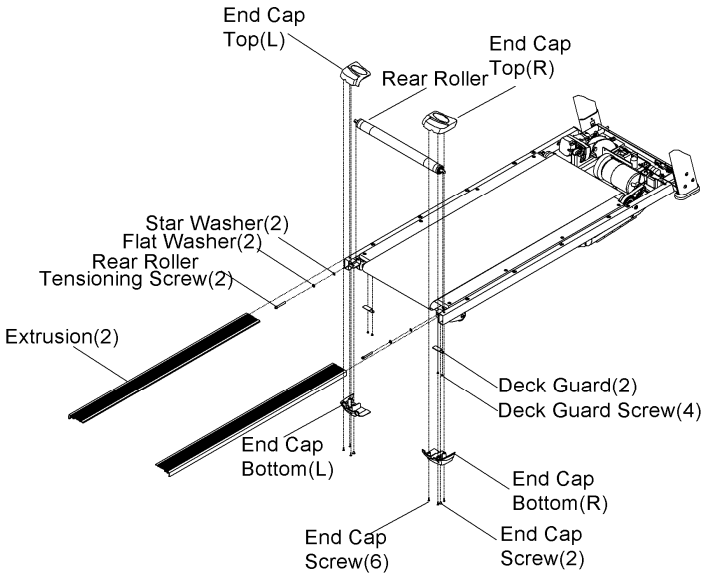
3. Fold the treadmill. Remove the end caps by removing end cap screws(6) from each end cap.

4. Remove the deck guards(2) by removing deck guard screws(4).

5. Unfold the treadmill. Remove the rear roller tensioning screws(2), flat washers(2) and star washers(2). Slide the extrusions(2) towards the front roller.

6. If necessary, clear the rear roller guards(2), then lift the rear roller out from the running belt.

7. Install new rear roller in reverse order of removal. Make sure to adjust the running belt tension. Refer back to belt adjustment in this section.



How To…Replace The Deck Cushion

Tools Required: Allen key set, Phillips screwdriver, and rubber hammer. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. At the power switch, turn off the unit, then unplug the power cord at the wall outlet.

2. move the motor cover front screws(2), side screws(2) of the motor cover, lift off the motor cover.

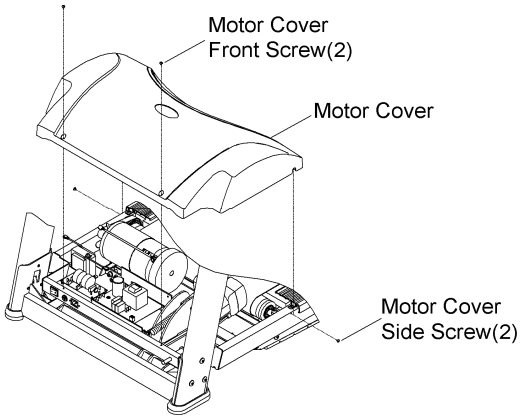
3. Fold the treadmill. Remove the end caps by removing end cap screws(6) from each end cap

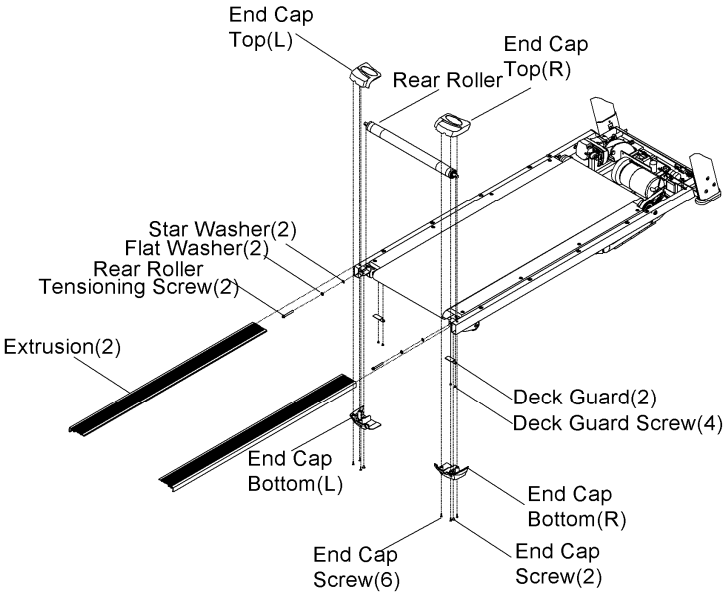
4. Remove the deck guards(2) by removing deck guard screws(4).

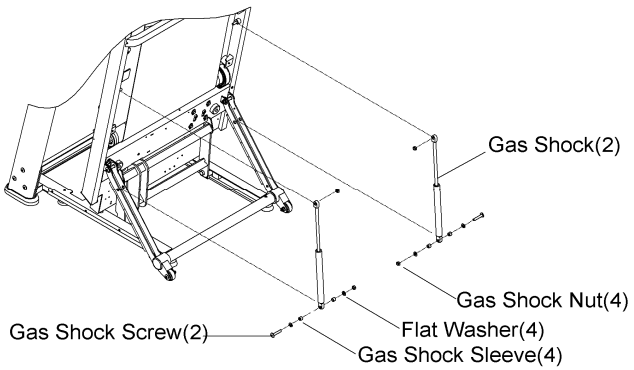
5. Remove the gas shocks by removing gas shock nuts(4), screws(2), flat washers(4) and sleeves(4) from each other.
   For T803, first remove the gas shocks and then the back cover screws(18), lift off the back cover

   CAUTION: for safety reasons, remove gas shocks to avoid injury when lifting off the deck. Without the weight of the deck, gas shocks will spring up and create safety concern.

6. Unfold the treadmill. Remove the rear roller tensioning screws(2), flat washers(4) and gas shock sleeves(4).







How To…Replace The Deck Cushion - Continued

Tools Required: Allen key set, Phillips screwdriver, and rubber hammer. (All fasteners are metric. Make sure that you have metric tools.) ……..

REMOVAL AND INSTALLATION

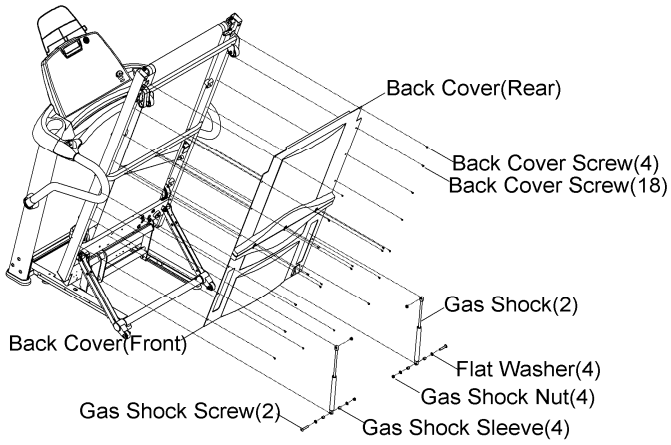
7. Slide each extrusion back.

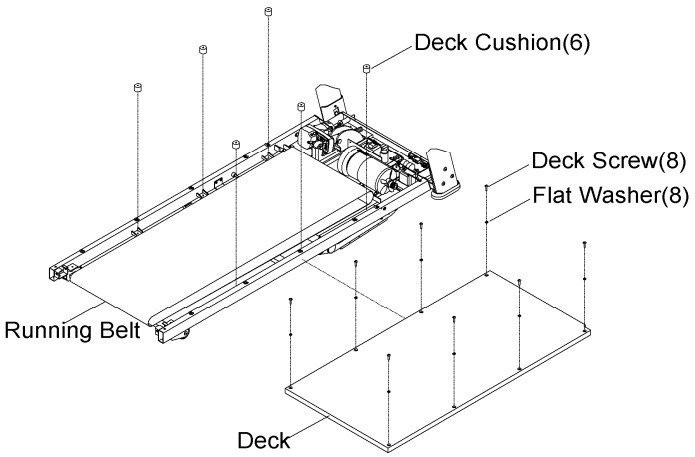
8. Remove the deck screws(8) and flat washers(8), then lift the deck out of the running belt.

9. Remove deck cushions(6) from the frame.

10. Install new deck cushions in reverse order.

11. Re-tension and center the running belt as described in the beginning of this section.





How To…Replace The Incline Motor

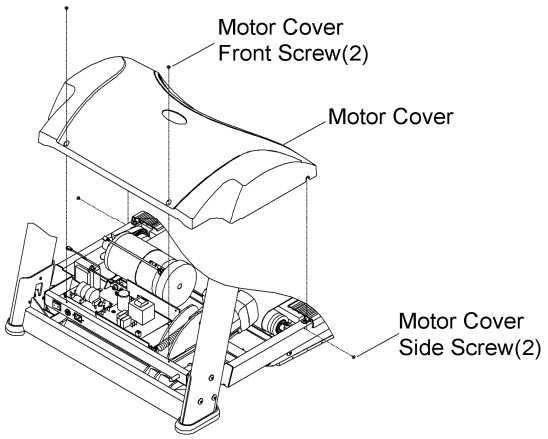
Tools Required: Phillips screwdriver, Sharp nose pliers, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. Turn power on. Check to see if treadmill is at 12% incline.

2. If not be able to process via console, try to connect incline motor wires directly to AC lines. The power will make incline go to 12%.

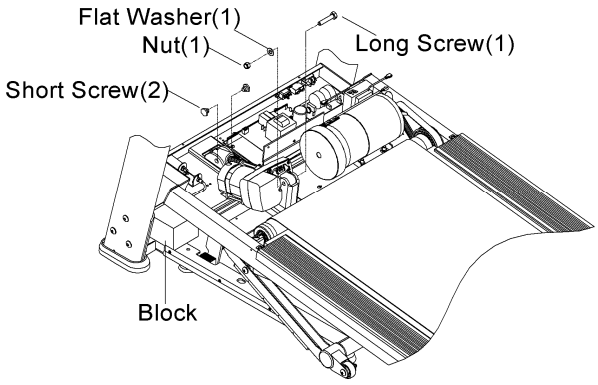
Caution: For safety reasons, put blocks between the frame to hold up the main frame.



3. At the power switch, turn off the unit and unplug the power cord at the wall outlet.

4. Remove the motor cover front screws(2),side screws(2) of the motor cover, lift off the motor cover.

5. Disconnect all cable connectors from the incline motor (Please refer to WIRING DIAGRAM – Section IV, page 9).

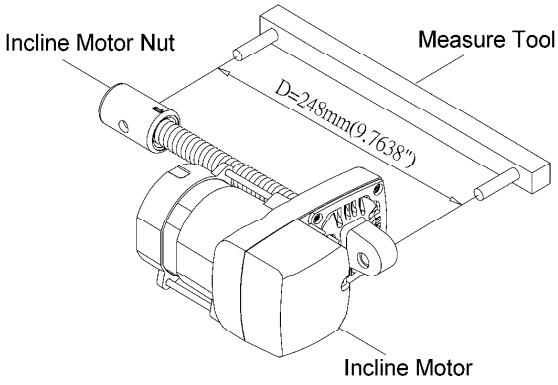


6. Remove the incline motor long screw(1) ,flat washer(1) and nut(1)

7. Remove the incline motor short screws(2).

8. Remove incline motor

9. Check new incline motor. Adjust the nut location so that the distance(D) between hole to hole on the incline motor is 248mm.
NOTE: Make sure D=248mm (9.7638 inch)



10. Install new incline motor in reverse order.
NOTE: Treadmill must be in the elevated position to assemble new incline motor.

11. Proceed to the following page for calibration the incline motor.

How To…Replace The Incline Motor

Tools Required: Phillips screwdriver, Sharp nose pliers, and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

When incline motor needs calibration:

1. When controller changed.
2. When incline motor is changed.
3. When both controller and incline motor are changed.
4. If controller CPU is changed.

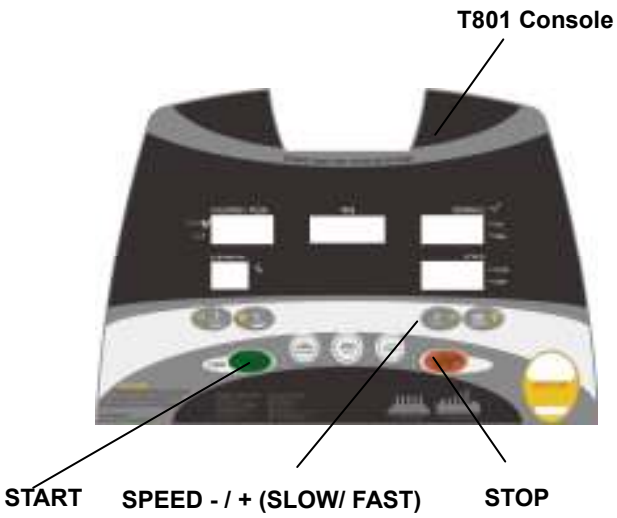
CALIBRATION

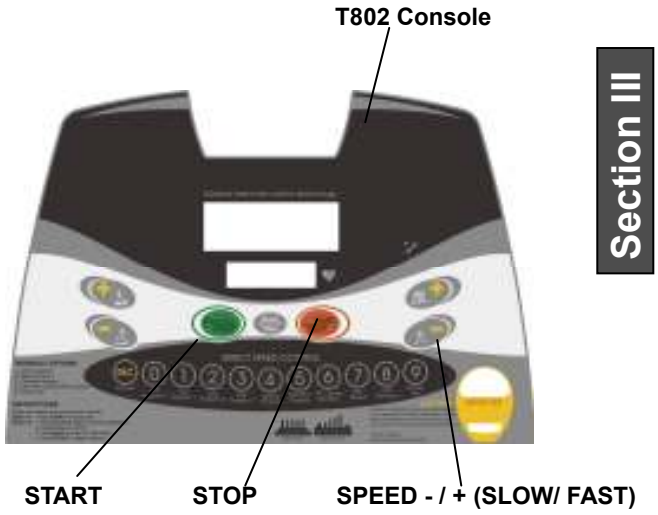
1. To calibrate, make sure the treadmill is not running (running belt not moving).
2. Turn power on. Wait a few seconds.
3. Press the STOP and SPEED- buttons at the same time, then the buttons STOP and SPEED+, then the SPEED- button. The treadmill is in calibration mode.

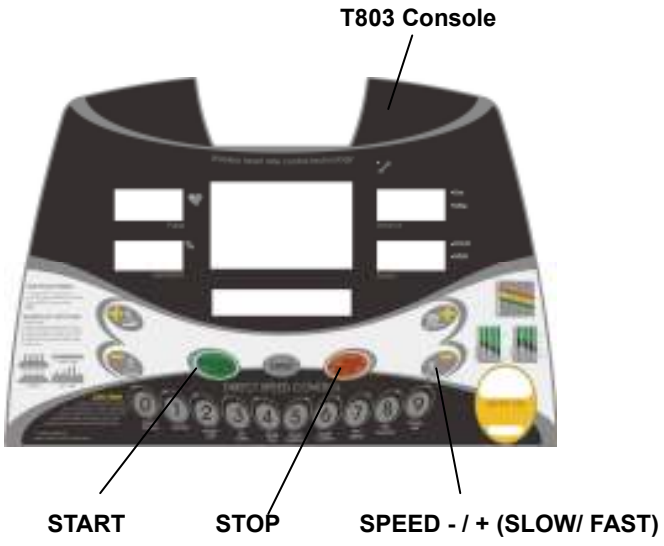
   Press the START button. The treadmill will run calibration for the incline motor.

   NOTE: If error 5 appears, it means the controller remembers a different value, so we need to bypass the controller to calibrate the incline motor. In that case, we have to disconnect the incline sensor cable to bypass the old memory (Please refer to WIRING DIAGRAM – Section IV, page 9). Then calibration can be done properly.

4. Just run through a few functions to make sure everything is in good condition.







How To…Replace The Motor Controller

Tools Required: Phillips Screwdriver (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

1. At the power switch, turn off the unit, then unplug the power cord at the wall outlet.

2. Remove the motor cover front screws (2), side screws(2) of the motor cover, lift off the motor cover.

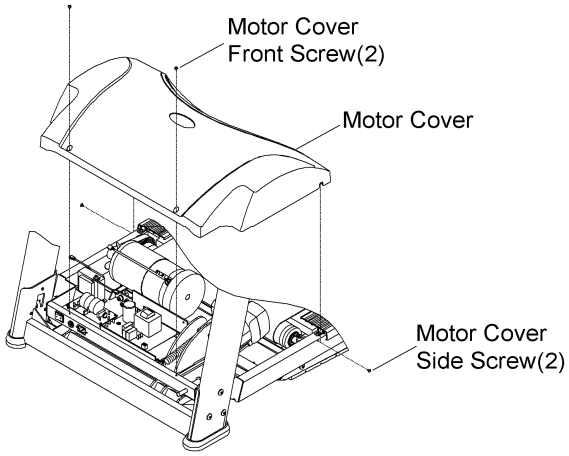
3. Disconnect all electrical connectors from the motor controller board.(Please refer to WIRING DIAGRAM – Section IV, page 9)

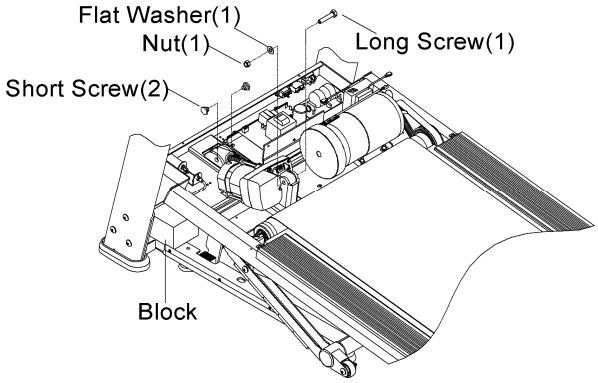
4. Remove the power switch, AC inlet and circuit breaker by removing the power AC inlet screws(2)

5. Remove the controller screws(4) and lift out the motor controller from the frame.

6. Install new motor controller in reverse order.

7. Make sure to calibrate incline motor. Refer back to incline motor calibration in this section.





HS Consumer Treadmill
How To…Replace The Moving Wheel

Tools Required: Allen key set**,** and open end wrench set. (All fasteners are metric. Make sure that you have metric tools.)

REMOVAL AND INSTALLATION

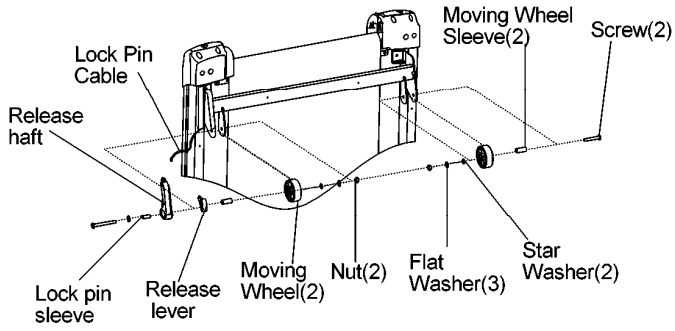
1. At the power switch, turn off the unit, then unplug the power cord at the wall outlet.

2. Fold the treadmill.

3. Remove the screws(2), flat washers(3)、star washers(2) and nuts(2).

4. Remove the moving wheel.

5. Install new moving wheel in reverse order.



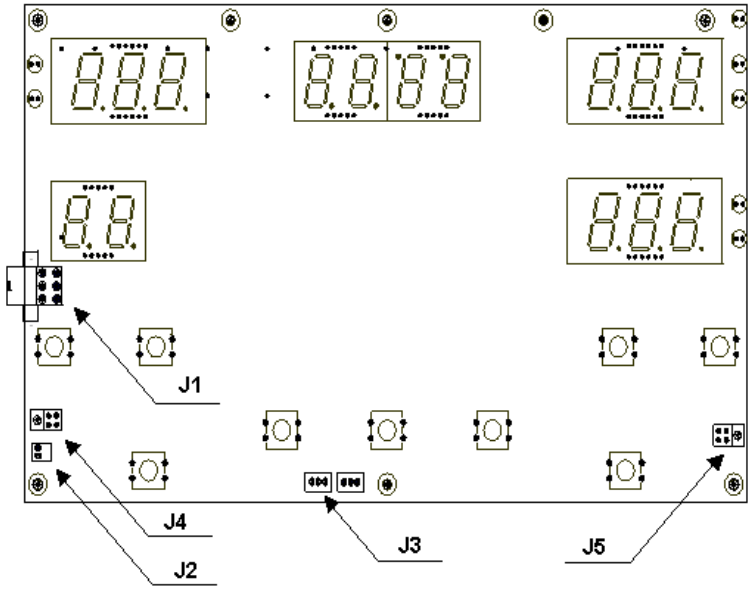
Section III

SECTION IV

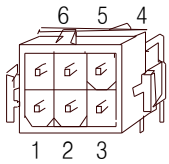
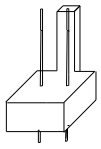
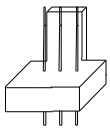
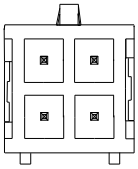
ELECTRONIC OVERVIEW AND WIRING BLOCK DIAGRAM

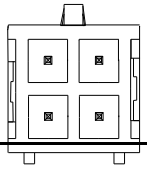
Function Description

The T801 console is designed to act as an intelligent display and keypad interface. It is intended to work in conjunction with the Motor Control module to form the nucleus of the I/O and control system. The console board periodically reads the keypad input port to check for user inputs, updates and refreshes the status LEDs, data display, and communicates with the Motor Control module.



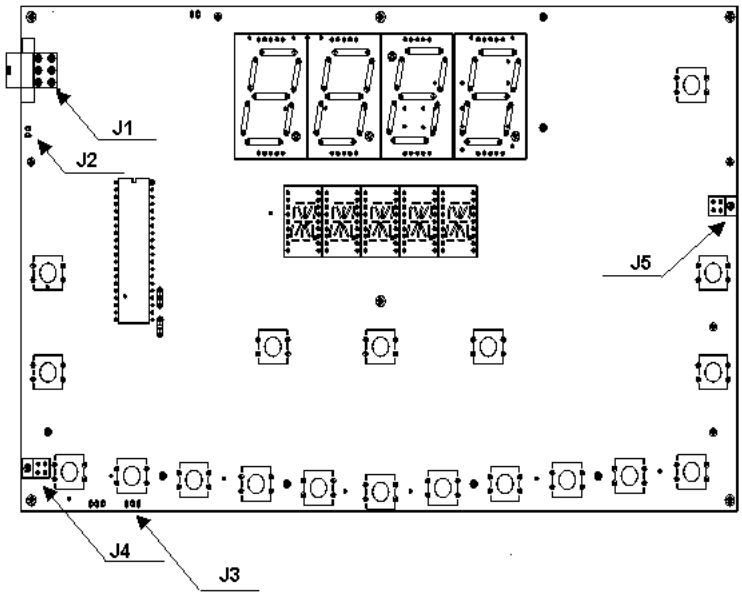
Connectors and Pin Functions

Connector	Location	Pin	Functional Description
J3 is a 6pin connector used for connection with MCB.		1	Safety key
		2	Ground
		3	Ground
		4	Vcc
		5	Receive
		6	Send
J2		1	INT-Skey
		2	GND
J3		1	SIG - INPUT(pulse)
		2	VCC (5V)
		3	GND
J4		1	GND
		2	GND
		3	EXT _ UP
		4	EXT _ DOWN

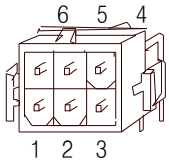
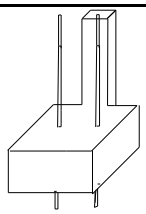
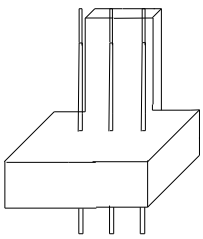
Connector	Location	Pin	Functional Description
J5		1	GND
		2	GND
		3	EXT _ FAST
		4	EXT _ SLOW

Functional Description

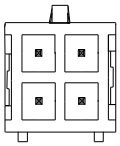
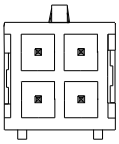
The T802 console is designed to act as an intelligent display and keypad interface. It is intended to work in conjunction with the Motor Control module to form the nucleus of the I/O and control system. The console board periodically reads the keypad input port to check for user inputs, updates and refreshes the status LEDs, data display, and communicates with the Motor Control module.



Connectors and Pin Functions

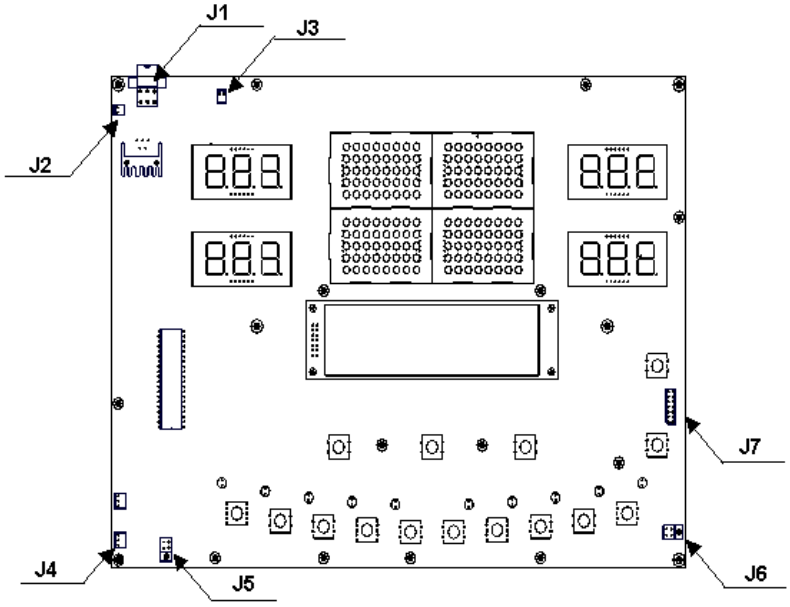
Connector	Location	Pin	Functional Description
J1 is a 6pin connector used for connection with MCB.		1	Safety key
		2	Ground
		3	Ground
		4	Vcc
		5	Receive
		6	Send
J2		1	INT-Skey
		2	GND
J3		1	SIG - INPUT(pulse)
		2	Vcc (5V)
		3	GND

Section IV

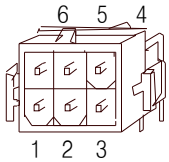
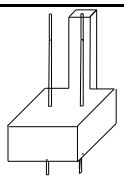
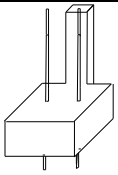
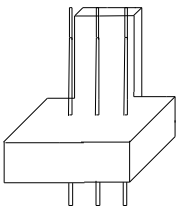
Connector	Location	Pin	Functional Description
J4		1	GND
		2	GND
		3	EXT _ UP
		4	EXT _ DOWN
J5		1	GND
		2	GND
		3	EXT _ FAST
		4	EXT _ SLOW

Functional Description

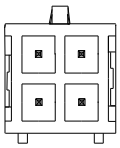
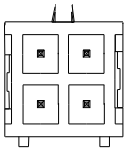
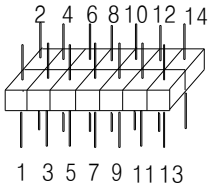
The T803 console is designed to act as an intelligent display and keypad interface. It is intended to work in conjunction with the Motor Control module to form the nucleus of the I/O and control system. The console board periodically reads the keypad input port to check for user inputs, updates and refreshes the LEDs status, data display, and communicates with the Motor Control module.



Connectors and Pin Functions

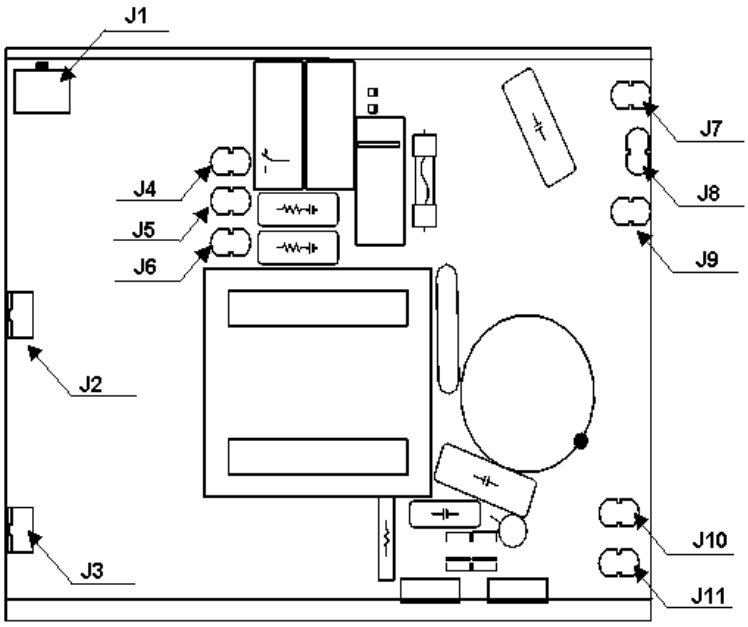
Connector	Location	Pin	Functional Description
J1 is a 6pin connector used for connection with MCB.		1	Safety key
		2	Ground
		3	Ground
		4	Vcc
		5	Receive
		6	Send
J2		1	INT-Skey
		2	GND
J3		1	INT-Skey
		2	GND
J4		1	SIG - INPUT(pulse)
		2	Vcc (5V)
		3	GND

Section IV

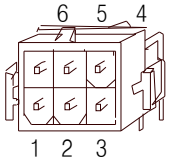
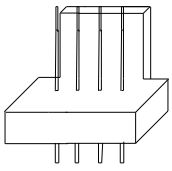
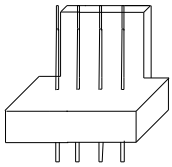
Connector	Location	Pin	Functional Description
J5		1	GND
		2	GND
		3	EXT _ UP
		4	EXT _ DOWN
J6		1	GND
		2	GND
		3	EXT _ FAST
		4	EXT _ SLOW
J7 is a 14pin connector used for VOICE BOARD.		1	SPA0
		2	SPA1
		3	SPA2
		4	SPA3
		5	SPA4
		6	SPA5
		7	SPA6
		8	SPA7
		9	SPA8
		10	SPCE
		11	SPPD
		12	SPEOM
		13	VCC
		14	Ground

Functional Description

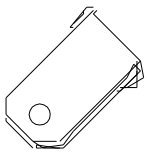
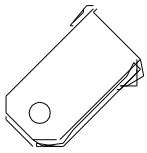
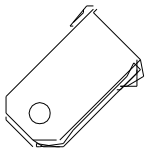
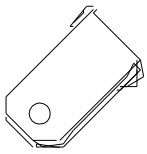
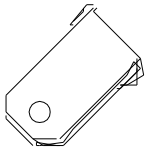
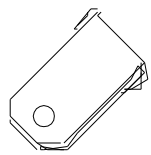
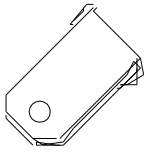
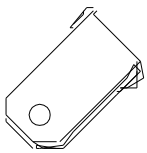
The Motor Controller PCBs are designed to act as an interface between the Drive motor, Display Console, and the Incline Motor. The desired belt speed and elevation is sent down to the motor controller and incline motor via the users selected input into the console. The motor is driven by a fixed frequency variable duty cycle signal. If an error condition is detected the main power relay receives its bus voltage from the console through the emergency pull switch. This relay can be energized by having the emergency pull switch in its proper place. Opening of the relay does not remove power to the console or the logic on the motor control board, but will interrupt power to the incline and drive motors.

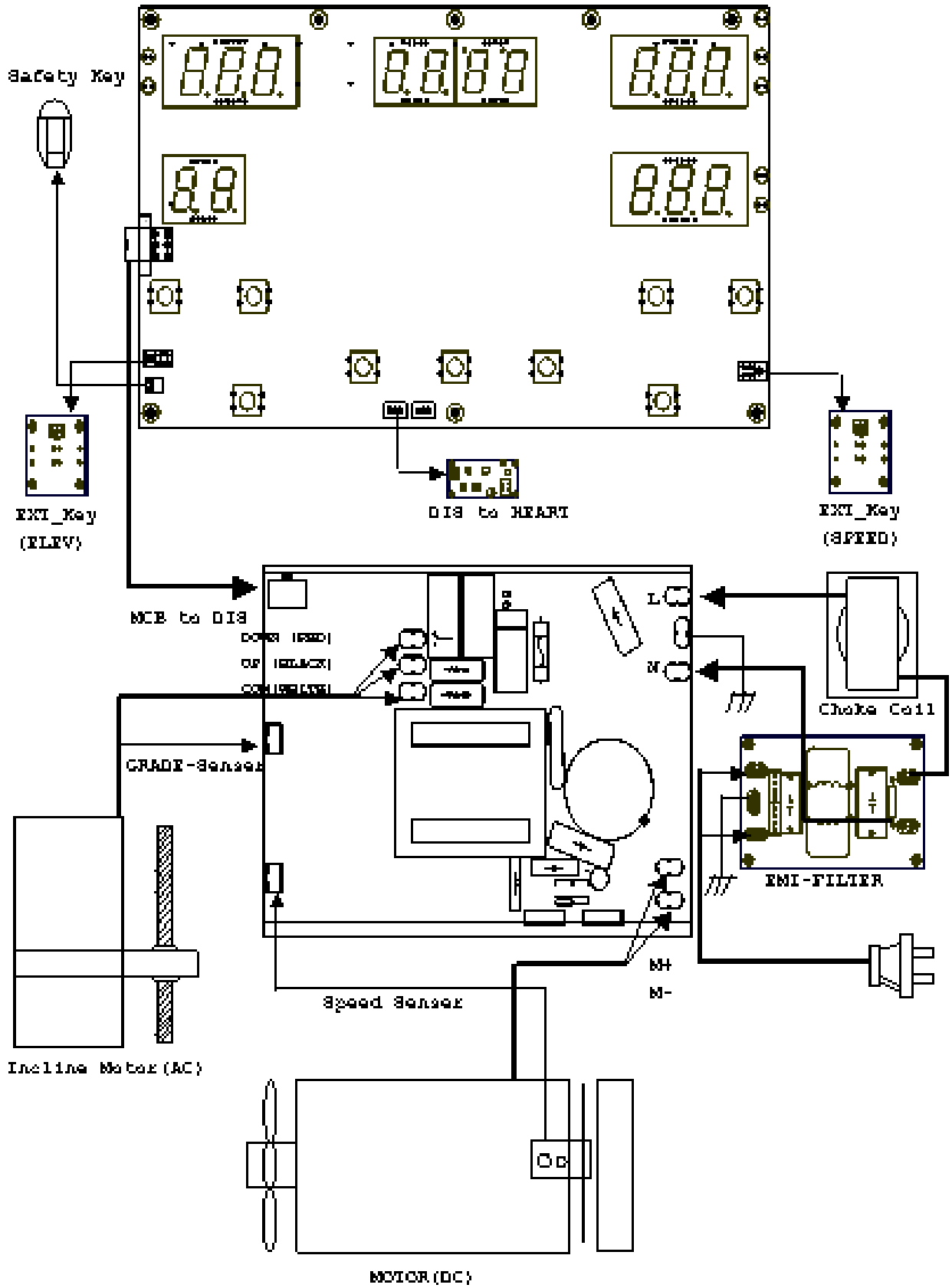


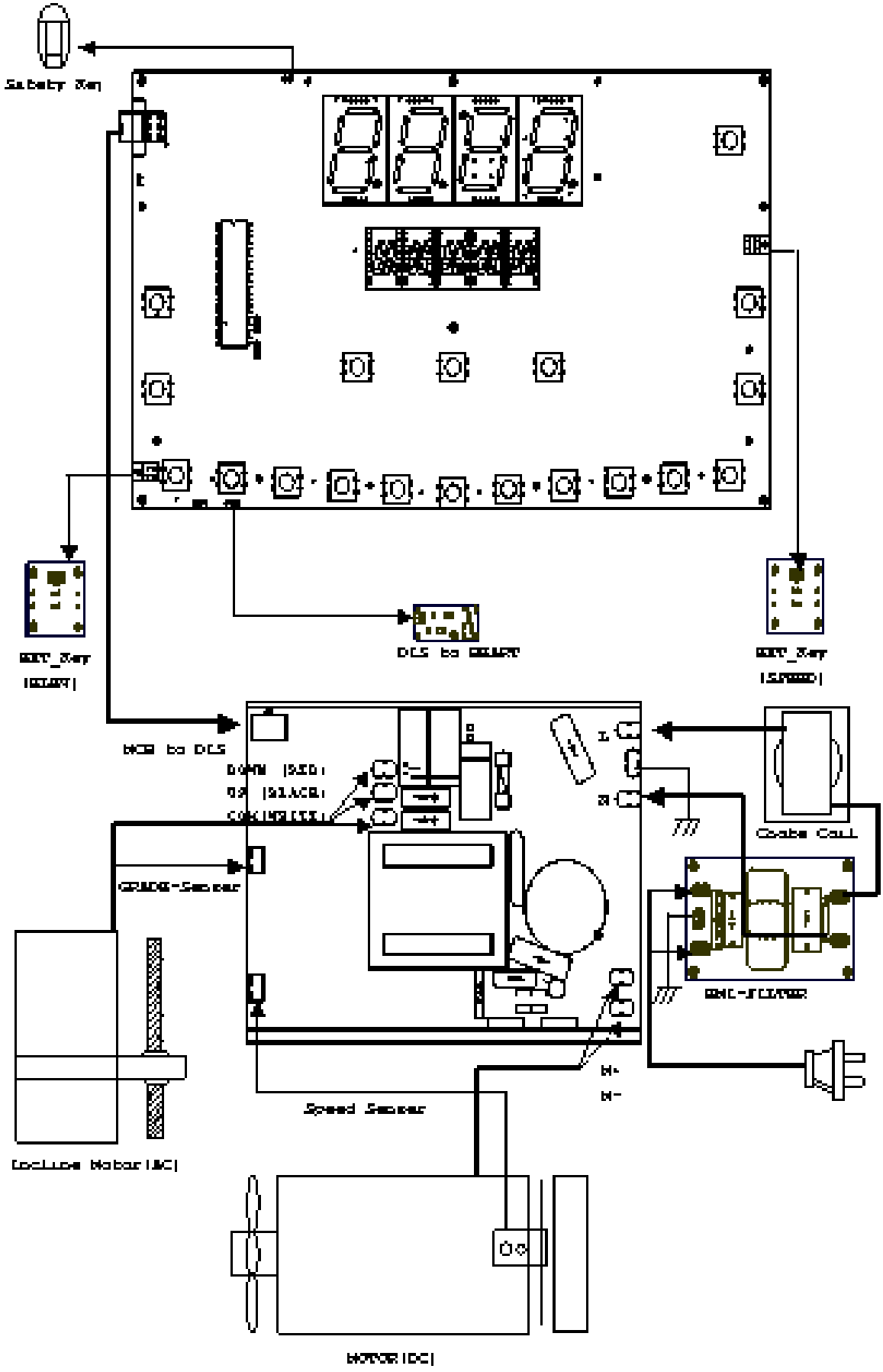
Connectors and Pin Functions

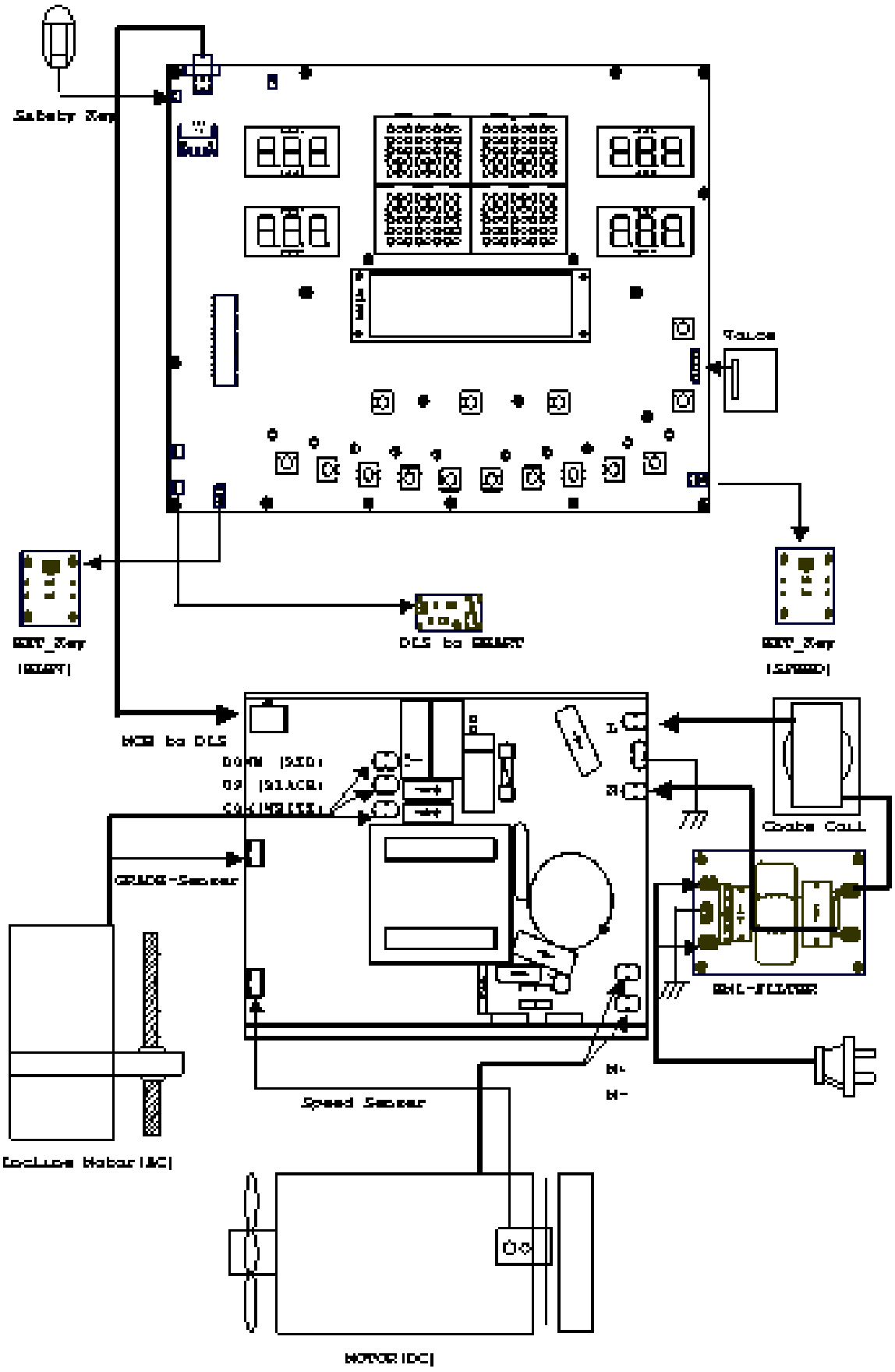
Connector	Location	Pin	Functional Description
J1 is a 6pin connector used to connect to the console.		1	Safety key
		2	Ground
		3	Ground
		4	V_{CC}
		5	Receive
		6	Send
J2 is a 4pin connector used for incline sensor connection.		1	GND
		2	V_{CC} (5V)
		3	GRADE
		4	GND
J3 is a 4pin connector used for speed sensor connection.		1	GND
		2	V_{CC} (12V)
		3	GND
		4	Sensor - Output

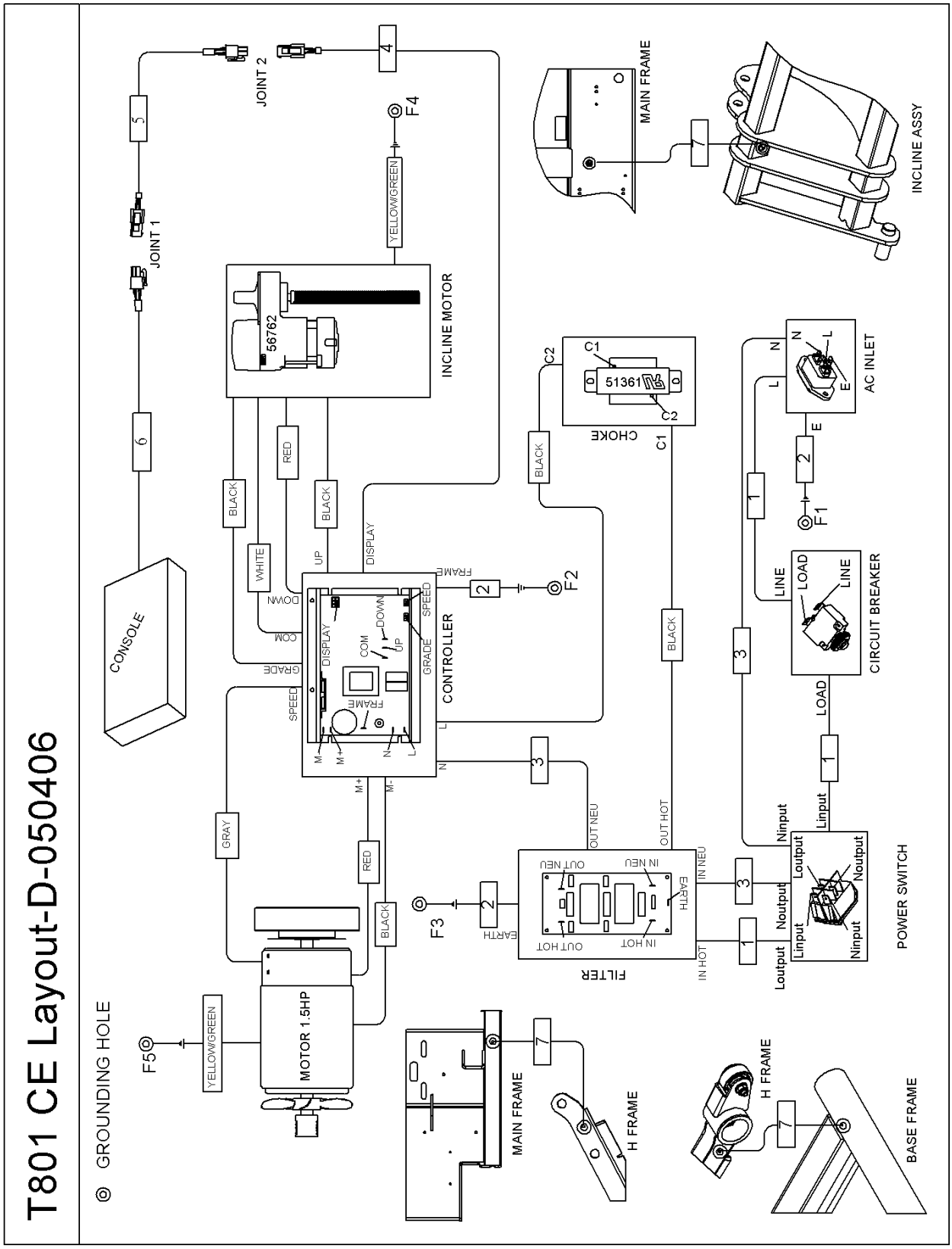
Section IV

Connector	Location	Pin	Functional Description
J4 is elevation motor UP LINE(BLACK) connect tab.		1	UP LINE(BLACK) connect tab.
J5 is elevation motor DOWN LINE (RED) connect tab.		1	DOWN LINE(RED) connect tab.
J6 is COM LINE (WHITE) to the elevation motor connect.		COM	COM LINE(WHITE) connecter tab.
J7 is AC INPUT (1) connect tab.		1	AC230V (1)
J8 is Earth line.		Earth	Earth LINE tab.
J9 is AC INPUT (2) connect tab.		1	AC230V (2)
J10 is DC MOTOR (+) connect tab.		1	MOTOR+ (RED)
J11 is DC MOTOR (-) connect tab.		1	MOTOR- (BLACK)


Safety Key
EXT_Key
(KEY)
DIS to HEART
EXT_Key
(SPEED)
MCB to DIS
L
N
Choke Coil
GRADE-Sensor
EMI-FILTER
M+
M-
Speed Sensor
Incline Motor(AC)
MOTOR(DC)

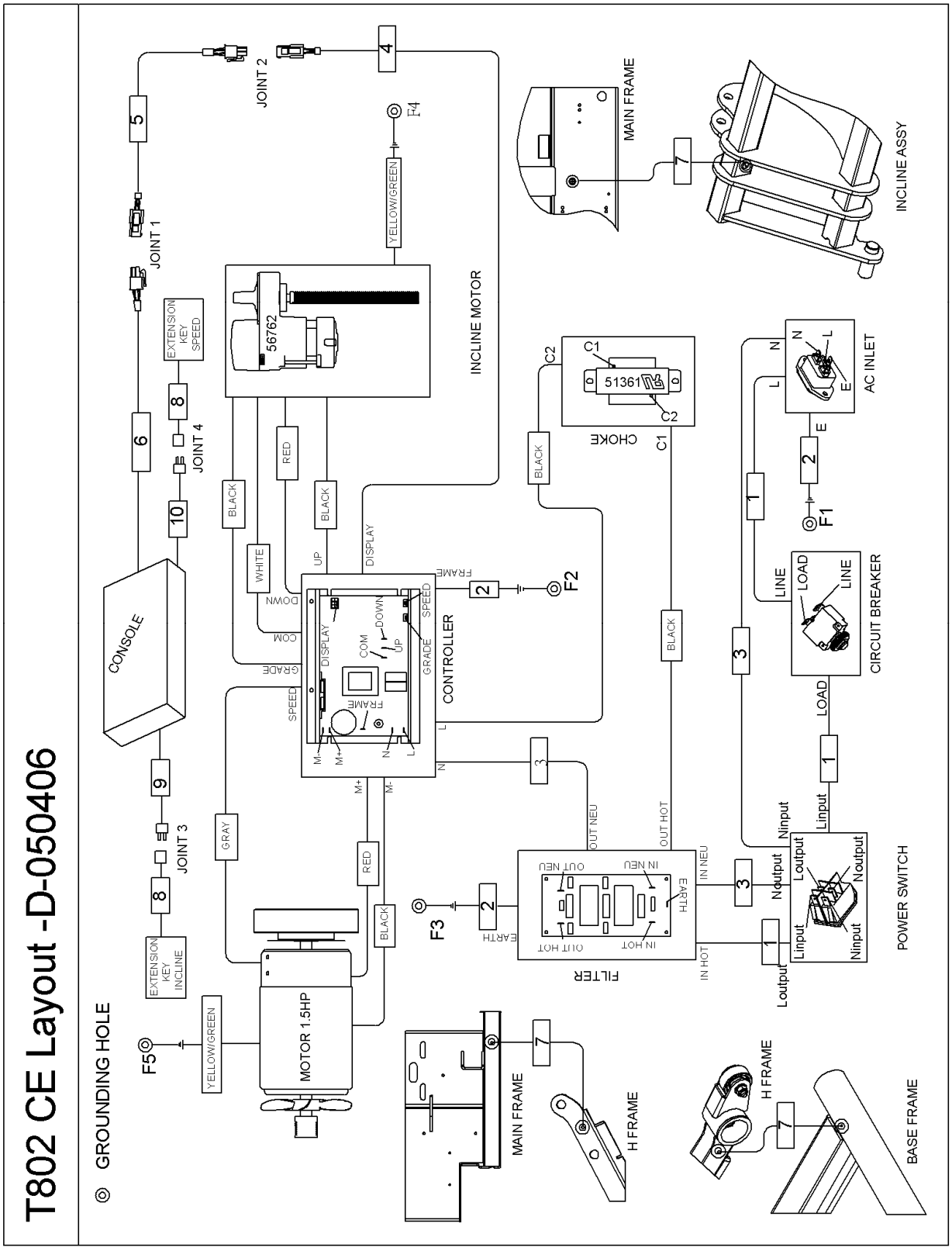

Safety Key
Cooling Fan
Motor (DC)




T801 CE Layout-D-050406
GROUNDING HOLE
CONSOLE
JOINT 1
JOINT 2
INCLINE MOTOR
56762
YELLOW/GREEN
F4
F5
F3
F2
F1
MOTOR 1.5HP
CONTROLLER
DISPLAY
SPEED
GRADE
UP
DOWN
COM
FRAME
BLACK
WHITE
RED
GRAY
CHOKE
51361
C1
C2
FILTER
OUT NEU
OUT HOT
IN NEU
IN HOT
EARTH
AC INLET
CIRCUIT BREAKER
LINE
LOAD
POWER SWITCH
Ninput
Loutput
Linput
Noutput
MAIN FRAME
H FRAME
BASE FRAME
INCLINE ASSY

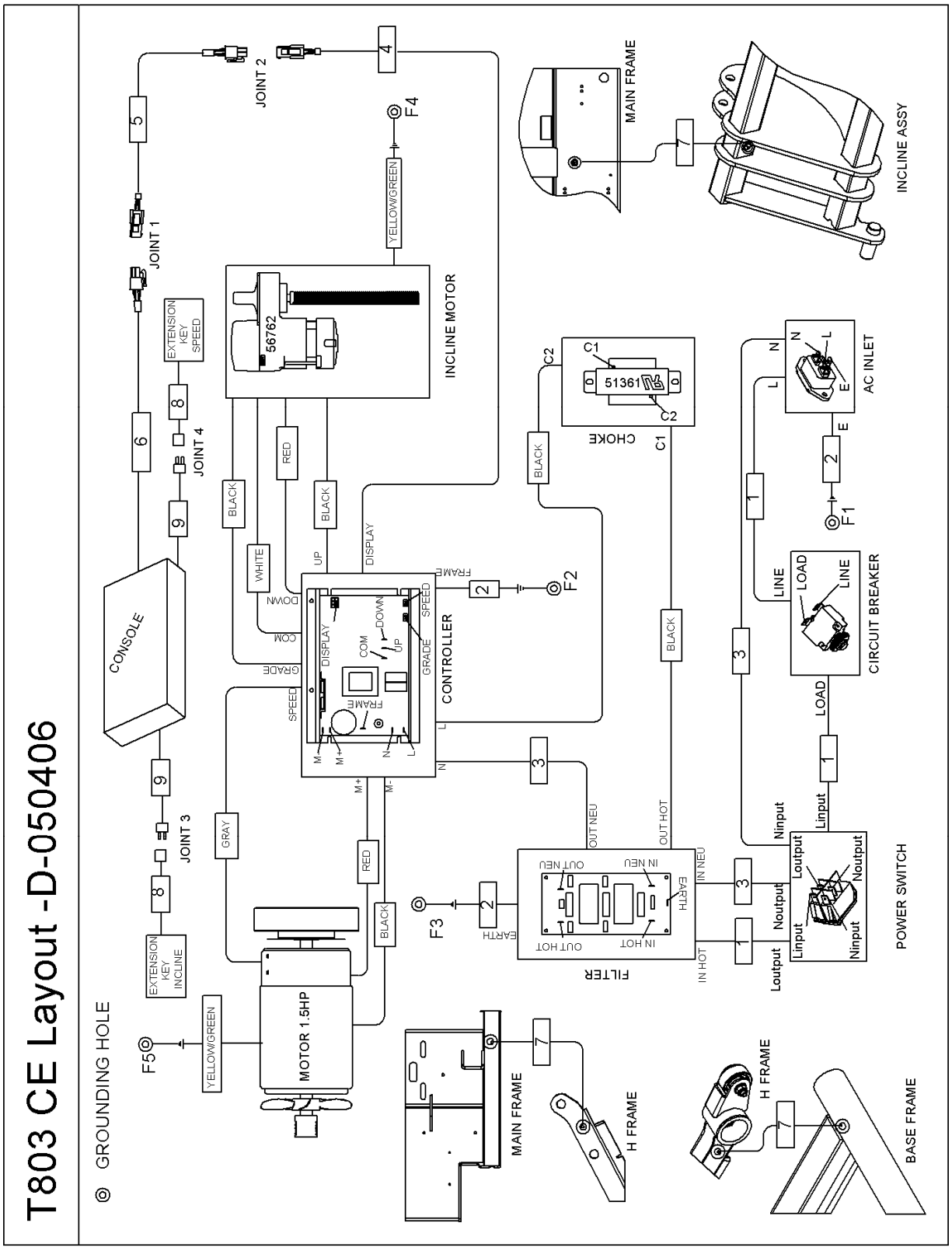
Section IV

T801 Wire CE Layout – D- 050406					
Item.	**PART NO.**	**Color**	**Length**	**QTY**	**Remark**
1	WI221100	BLACK	100mm	3	
2	WI233080	YELLOW/GREEN	80mm	3	
3	WI222120	WHITE	120mm	3	
4	56764	BLACK	1920mm	1	
5	56766	BLACK	1230mm	1	
6	56690	BLACK	440mm	1	
7	WI336120	--	120mm	3	


T802 CE Layout -D-050406
GROUNDING HOLE
CONSOLE
JOINT 1
JOINT 2
JOINT 3
JOINT 4
EXTENSION KEY SPEED
EXTENSION KEY INCLINE
INCLINE MOTOR
56762
YELLOW/GREEN
MOTOR 1.5HP
CONTROLLER
DISPLAY
SPEED
GRADE
TRAME
UP
DOWN
COM
CHOKE
51361
FILTER
OUT NEU
OUT HOT
IN NEU
IN HOT
EARTH
AC INLET
CIRCUIT BREAKER
POWER SWITCH
LINE
LOAD
Ninput
Noutput
Linput
Loutput
MAIN FRAME
H FRAME
BASE FRAME
INCLINE ASSY
F1
F2
F3
F4
F5
BLACK
WHITE
RED
GRAY

Section IV

T802 Wire CE Layout – D- 050406					
Item.	**PART NO.**	**Color**	**Length**	**QTY**	**Remark**
1	WI221100	BLACK	100mm	3	
2	WI233080	YELLOW/GREEN	80mm	3	
3	WI222120	WHITE	120mm	3	
4	56764	BLACK	1920mm	1	
5	56766	BLACK	1230mm	1	
6	56690	BLACK	440mm	1	
7	WI336120	--	120mm	3	
8	56787	BLACK	270mm	2	
9	56812	BLACK	200mm	1	
10	56813	BLACK	380mm	1	

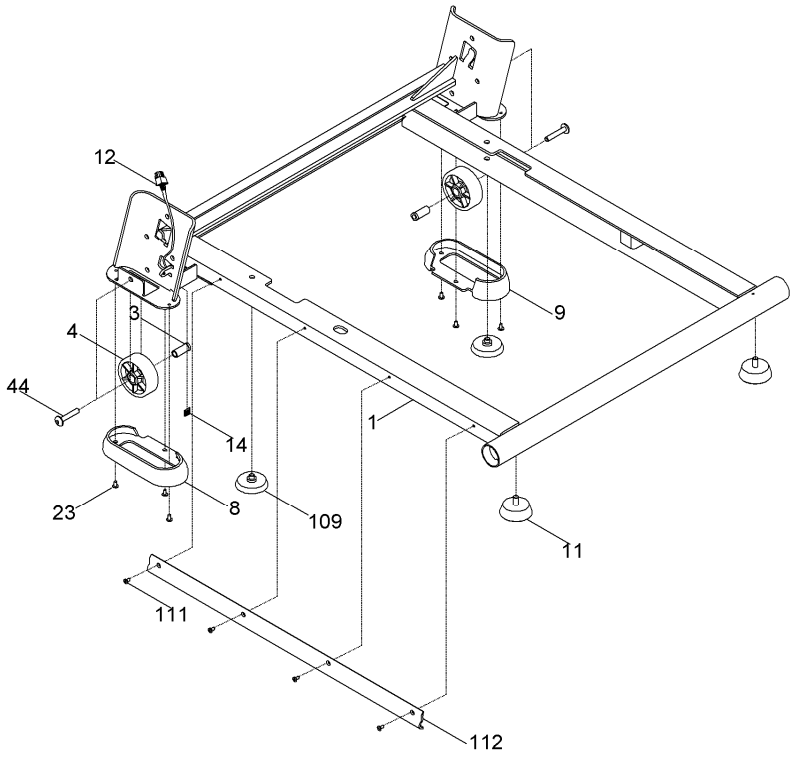

T803 CE Layout -D-050406
GROUNDING HOLE
CONSOLE
JOINT 1
JOINT 2
JOINT 3
JOINT 4
EXTENSION KEY SPEED
EXTENSION KEY INCLINE
INCLINE MOTOR
56762
INCLINE ASSY
MAIN FRAME
H FRAME
BASE FRAME
MOTOR 1.5HP
CONTROLLER
DISPLAY
SPEED
GRADE
UP
DOWN
COM
FRAME
CHOKE
51361
FILTER
AC INLET
CIRCUIT BREAKER
POWER SWITCH
LINE
LOAD
Linput
Ninput
Loutput
Noutput
F1
F2
F3
F4
F5
YELLOW/GREEN
BLACK
RED
WHITE
GRAY

T803 Wire CE Layout - D- 050406					
Item.	**PART NO.**	**Color**	**Length**	**QTY**	**Remark**
1	WI221100	BLACK	100mm	3	
2	WI233080	YELLOW/GREEN	80mm	3	
3	WI222120	WHITE	120mm	3	
4	56764	BLACK	1920mm	1	
5	56766	BLACK	1230mm	1	
6	56690	BLACK	440mm	1	
7	WI336120	--	120mm	3	
8	56787	BLACK	270mm	2	
9	56812	BLACK	200mm	2	

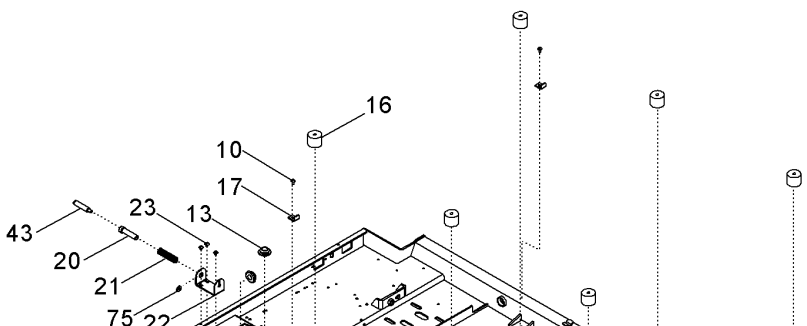
SECTION V

PARTS IDENTIFICATION

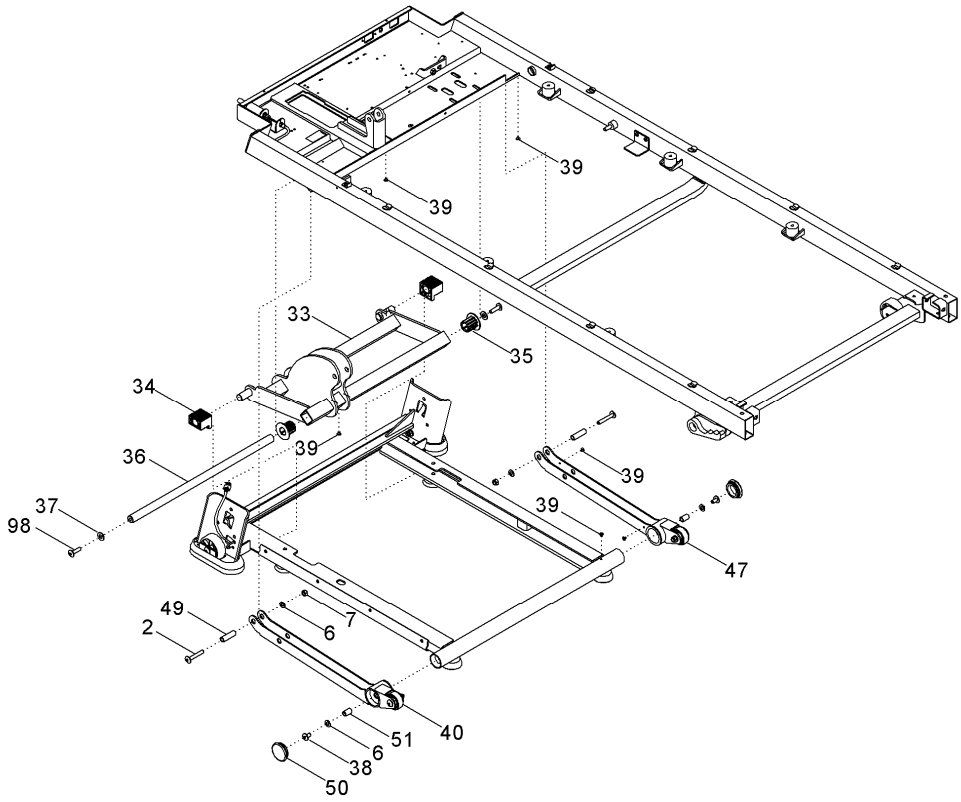
T801 (Rev. B) ***Update: 2005.09.05***



Explod

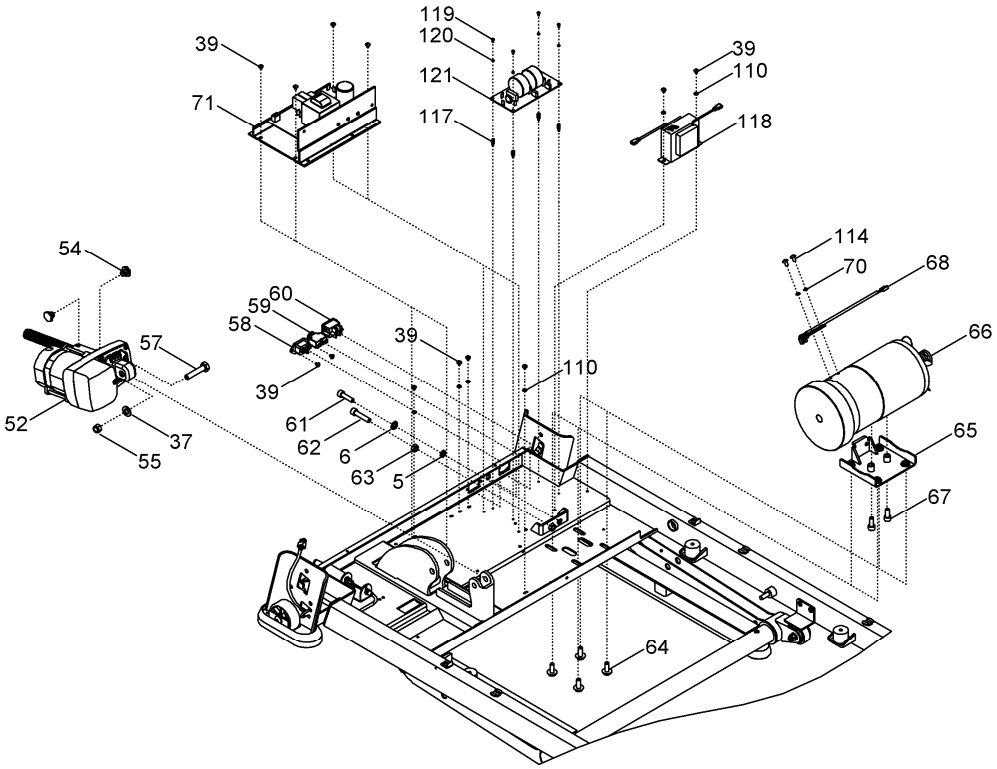


T801 (Rev. B) ***Update: 2005.09.05***

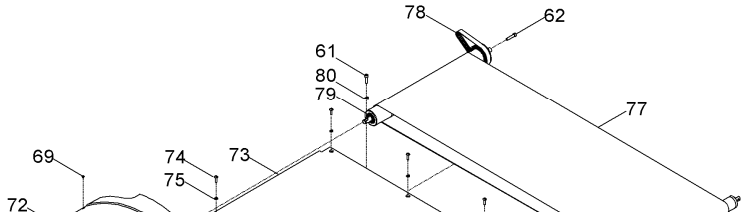


Explode drawing & part list 050905

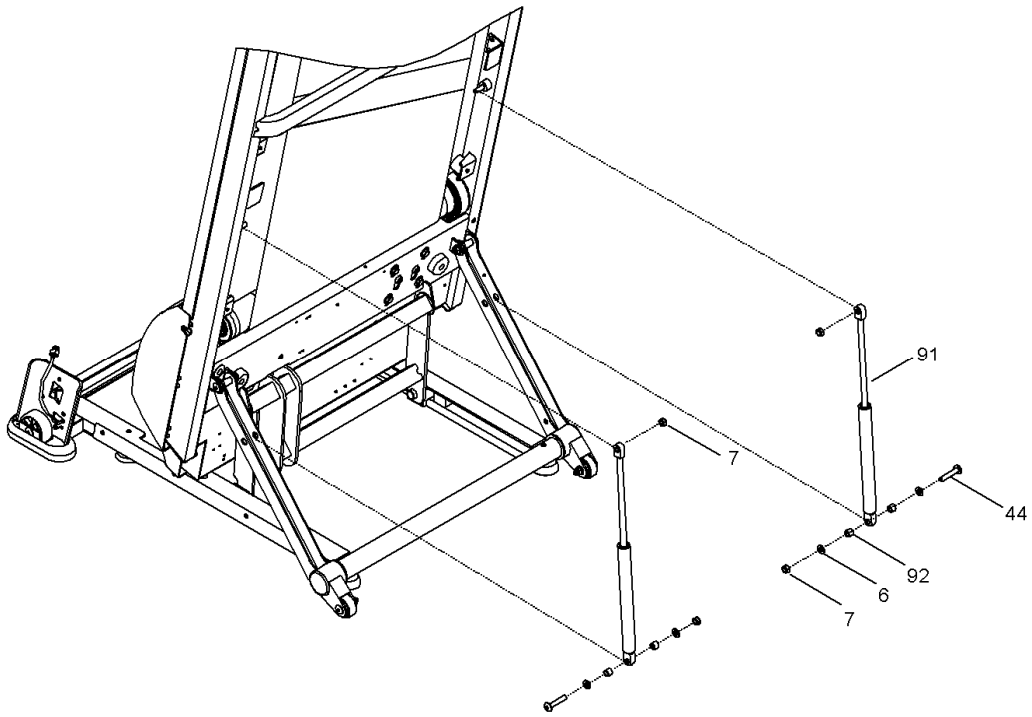
T801 (Rev. B) ***Update: 2005.09.05***



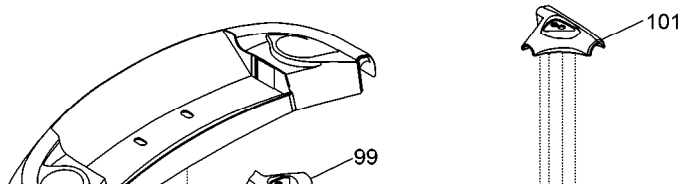
Explode drawing & part list 050905



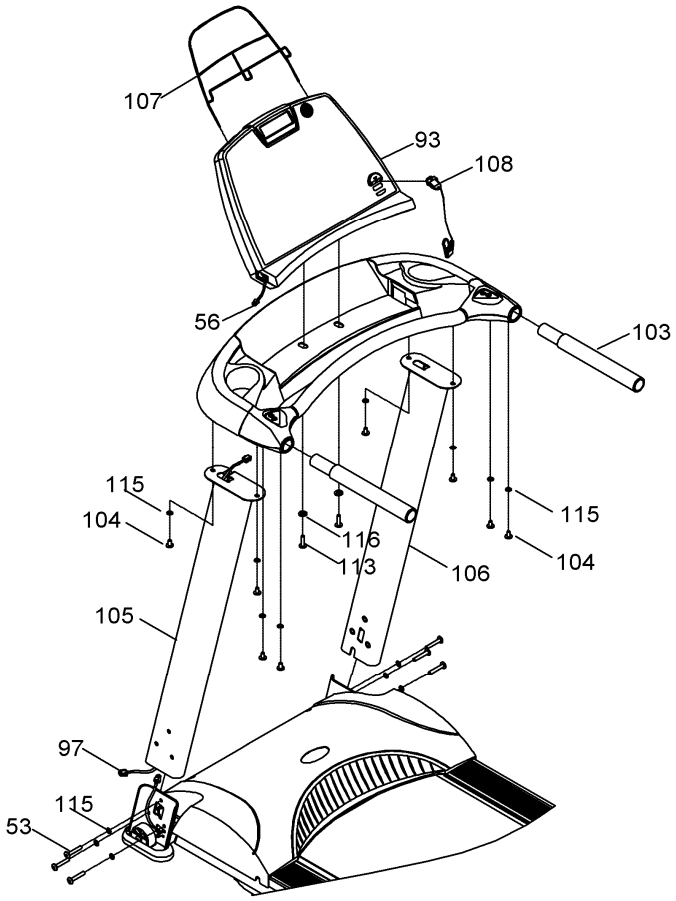
T801 (Rev. B) ***Update: 2005.09.05***



Explode drawing & part list 050905



T801 (Rev. B)	*Update: 2005.09.05*



Explode drawing & part list 050905

T801 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
1	Coating, frame, base	1
2	Screw, dome M8x55mm	2
3	Bushing, wheel	2
4	Wheel, moving	4
5	Washer, star OD15xID8.4x0.8T	7
6	Washer, flat OD17*ID9*1.6t	16
7	Nut, hex, nylon M8*7.8H	10
8	Cover, fix, wheel, front, L	1
9	Cover, fix, wheel, front, R	1
10	Screw, dome M4x10mm	12
11	Foot	2
12	Cable, signal, frame, main (1920mm)	1
13	Bushing, snap	2
14	Mount, tie, cable	1
15	Coating, frame, main	1
16	Cushion, deck	6
17	Bracket, stopper, side landing	2
18	Screw, dome M5x15mm	14
19	Coating, stopper, H frame	2
20	Pin, lock, rear	1
21	Spring, pin, lock	1
22	Bracket, pin, lock	1
23	Screw, dome M4x8mm	9
24	Cable, pin, lock	1
25	Foot, frame, main	2
26	Lever, release	1
27	Haft, release	1
28	Sleeve, pin, lock	1
29	Screw, dome M8x70mm	1
30	Bushing, wheel, rear	2
31	Screw, dome head M8*50mm	1
32	Rubber	1
33	Coating , incline	1
Explode drawing & part list 050905		

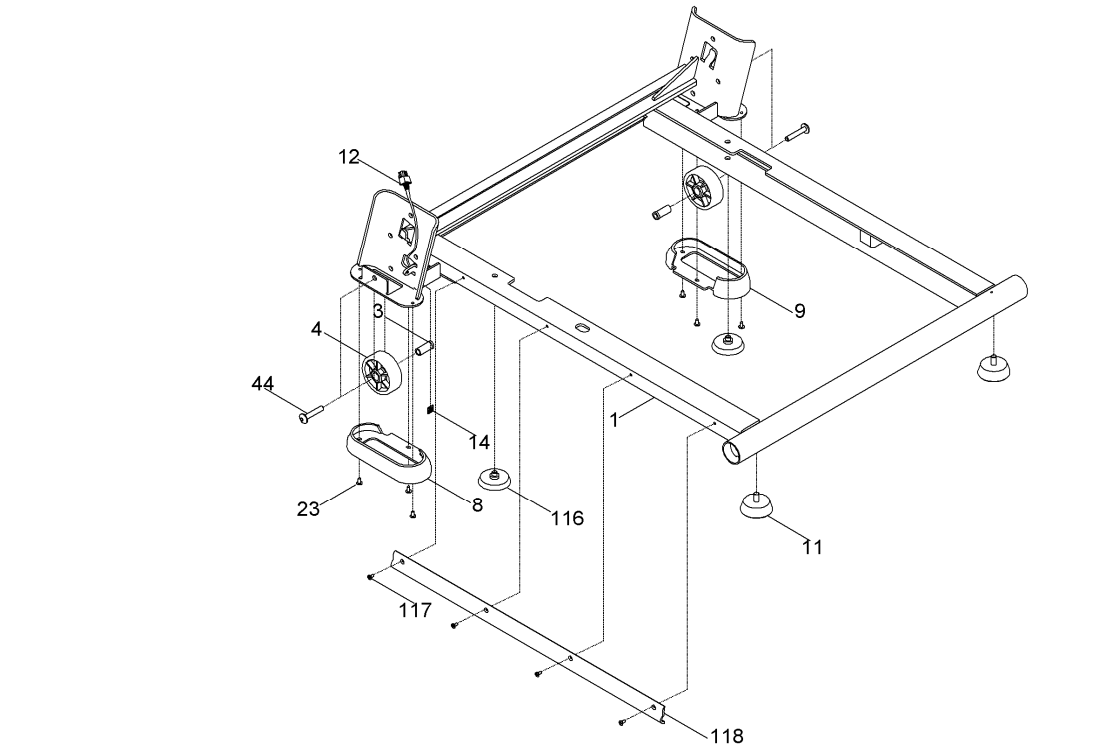
T801 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
34	Slider, track	2
35	Bushing, tube, connection	2
36	Shaft, fixing	1
37	Washer, flat OD21xID11x2.0T	3
38	Screw, dome M8x30mm	2
39	Screw, dome M4x6mm	18
40	Assy, frame, H, L	1
41	Coating, frame, H, L	1
42	Bushing, fix, frame, base	2
43	Pin, lock, front	1
44	Screw, dome M8x45mm	6
45	Sleeve, shaft	2
46	Wheel, incline	2
47	Assy, frame, H, R	1
48	Coating, frame, H, R	1
49	Sleeve, frame, H	2
50	Cap, frame, H	2
51	Sleeve, fixing, frame, base	2
52	Motor, incline, 230V	1
52a	Assy, motor, incline, 230V	1
52b	Nut, motor, incline	1
52c	Cap, motor, incline	1
53	Screw, dome M8*50mm	6
54	Screw, hex, special	2
55	Nut, hex, nylon M10x9.5	1
56	Cable, Signal, console (440mm)	1
57	Screw, socket M10x50mm	1
58	Inlet, AC	1
59	Breaker, circuit, 230V	1
60	Switch, power	1
61	Screw, socket M8x30mm	2
Explode drawing & part list 050905		

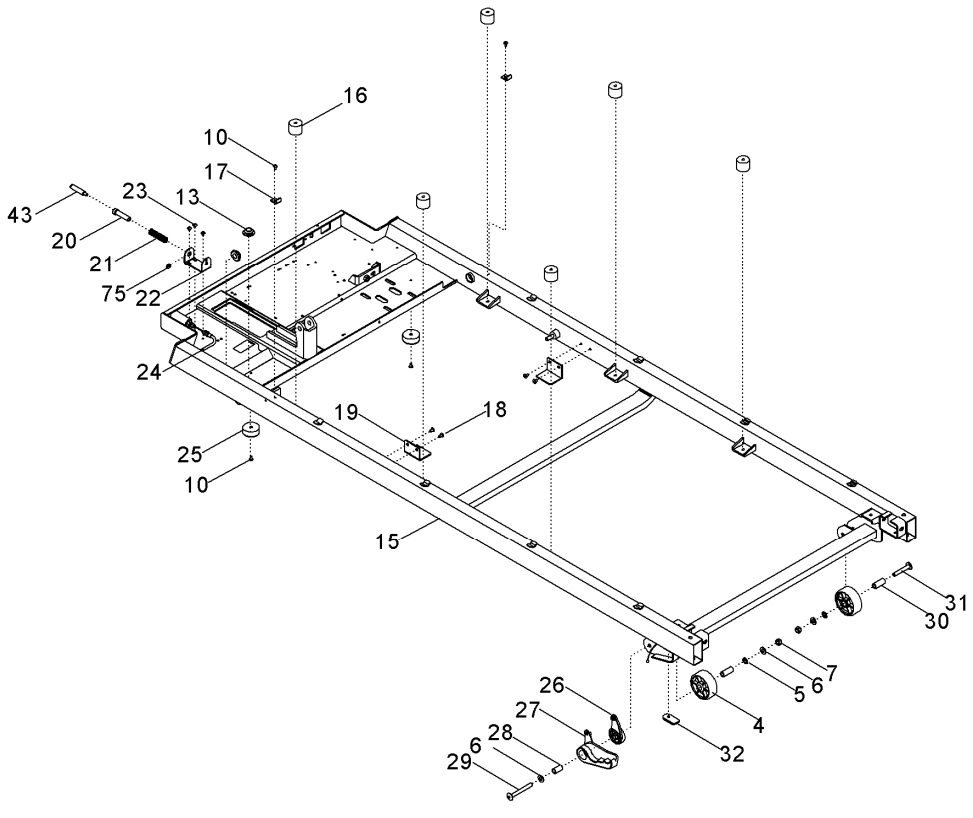
T801 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
62	Screw, socket M8x40mm	2
63	Nut, hex M8x6.5	1
64	Screw, flange M8x20mm	4
65	Weldment , bracket, motor	1
66	Motor, drive, 230V	1
67	Screw, socket M8x20mm	2
68	Sensor, speed, w/ cable	1
69	Screw, dome M5x10mm	6
70	Washer, spring OD9.2xID5.1x1.3T	2
71	Controller	1
72	Motor cover	1
73	Deck	1
74	Screw, dome M6x25mm	8
75	Washer, flat OD12.5xID6.6x1.6T	9
76	Guard, deck	2
77	Belt, running	1
78	Belt, drive	1
79	Roller, front	1
80	Washer, curve OD17xID8.5x1.5T	1
81	Roller, rear	1
82	Landing, side	2
83	Tape, foam, 1 side adhesive	4
84	Cap, frame, main, rear, top, L	1
85	Cap, frame, main, rear, btm, L	1
86	Cap, frame, main, rear, top, R	1
87	Cap, frame, main, rear, btm, R	1
88	Screw, socket M8x65mm	2
89	Screw, dome M6x10mm	2
90	Screw, dome M4x20mm	6
91	Gas shock	2
Explode drawing & part list 050905		

T801 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
92	Sleeve, gas shock	4
93	Console	1
94	Cover, base, console	1
95	Coating, bracket, console	1
96	Bar, horizontal	1
96a	Bar, horizontal	1
96b	Grip, foam, bar, horizontal	1
97	Cable, signal, upright post (1230mm)	1
98	Screw, dome M8x20mm	4
99	Cover, bar, handle, top, L	1
100	Cover, bar, handle, btm, L	1
101	Cover, bar, handle, top, R	1
102	Cover, bar, handle, btm, R	1
103	Bar, handle	2
103a	Coating, tube, bar, handle	1
103b	Grip, foam, bar, handle	1
103c	Cap, handlebar end	1
104	Screw, dome M8*15mm	8
105	Coating, upright, L	1
106	Coating, upright, R	1
107	Rack, book	1
108	Key, safety	1
109	Foot, front, frame, frame	2
110	Washer, star OD8.5xID4.3x0.45T	6
111	Screw, countersunk M5x8mm	4
112	Jacket, cable, frame, base	1
113	Screw, dome M8x30mm	2
114	Screw, dome M5x10mm	2
115	Washer, star OD15xID8.4x0.8T	14
116	Washer, flat OD21xID11x2.0T	2
117	Sleeve, screw, Cu	4
Explode drawing & part list 050905		

T801 (Rev. D)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
118	Choke	1
119	Screw, Phillips M3x6mm	4
120	Washer, spring OD5xID3.3x0.8T	4
121	Filter	1
Explode drawing & part list 050905		

T802 (Rev. B) ***Update: 2005.09.05***

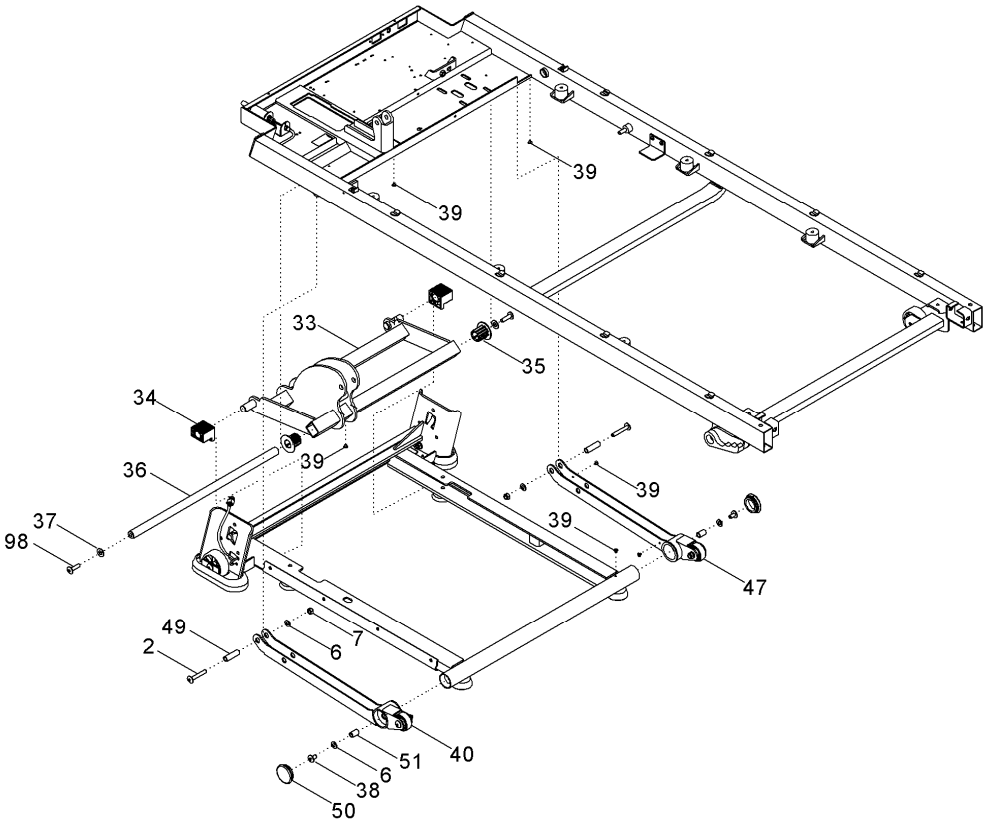


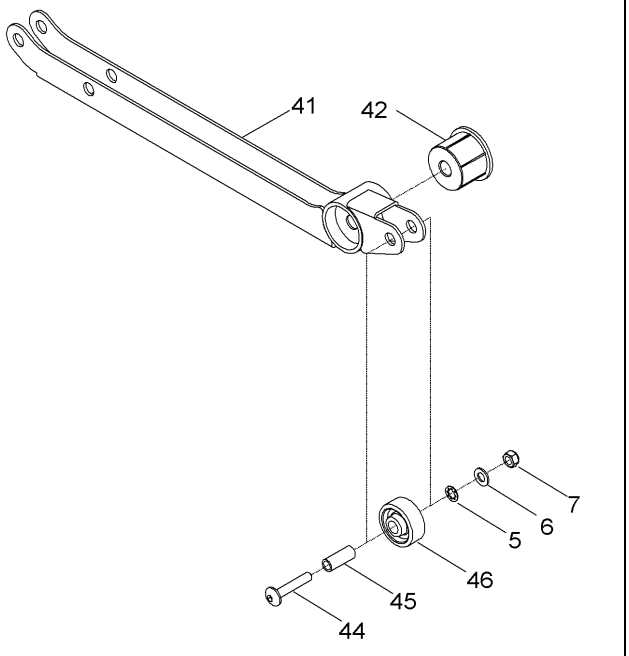


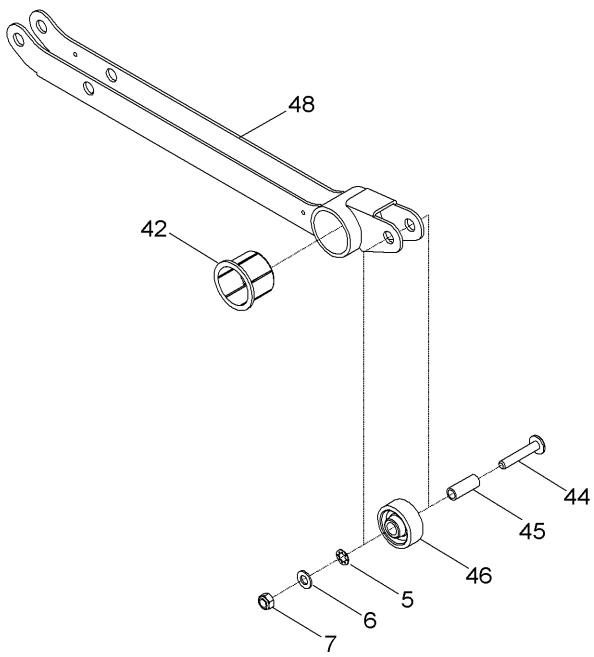
Explode drawing & part list 050905

Section V

T802 (Rev. B) ***Update: 2005.09.05***

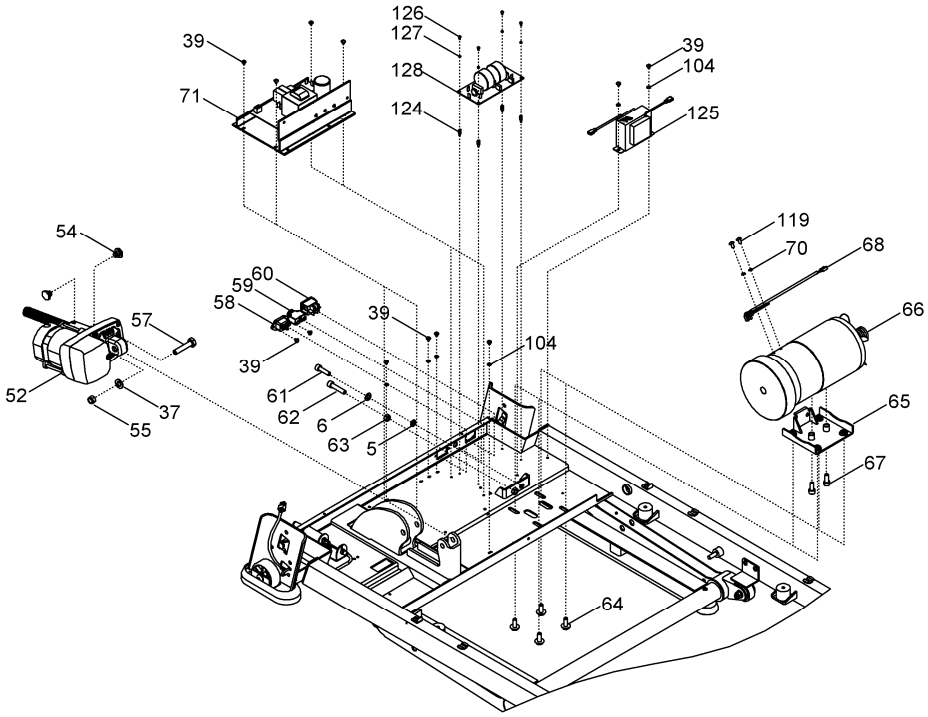




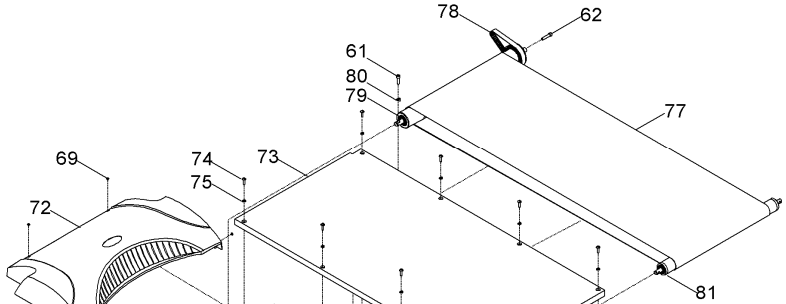


Explode drawing & part list 050905

T802 (Rev. B) ***Update: 2005.09.05***

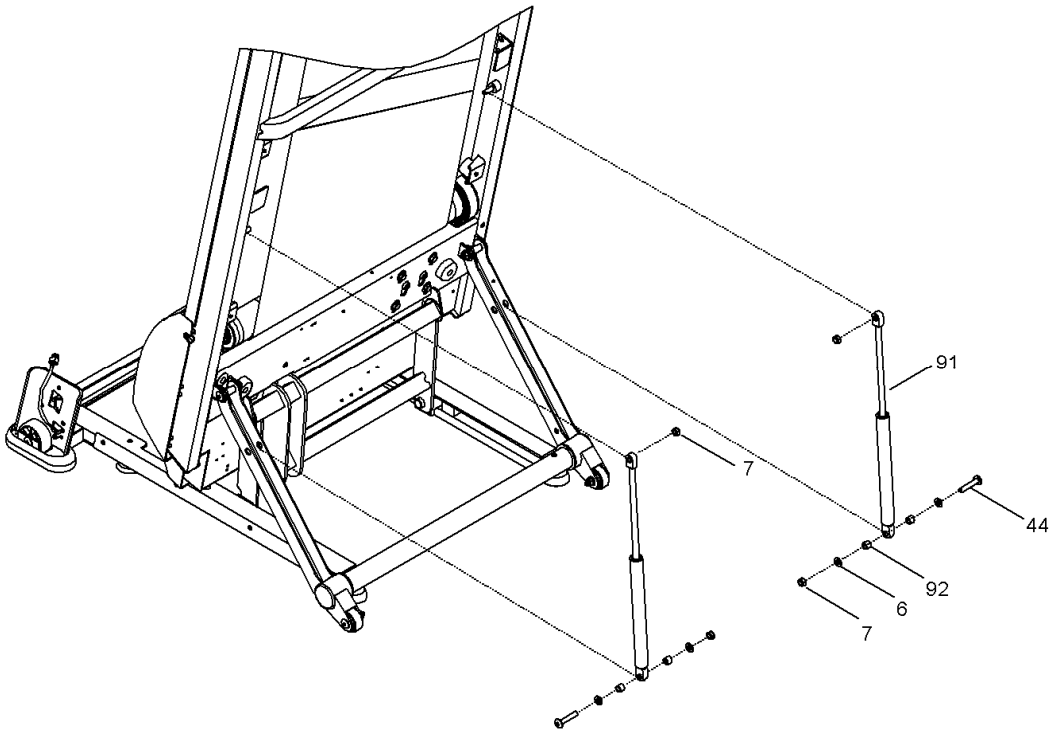


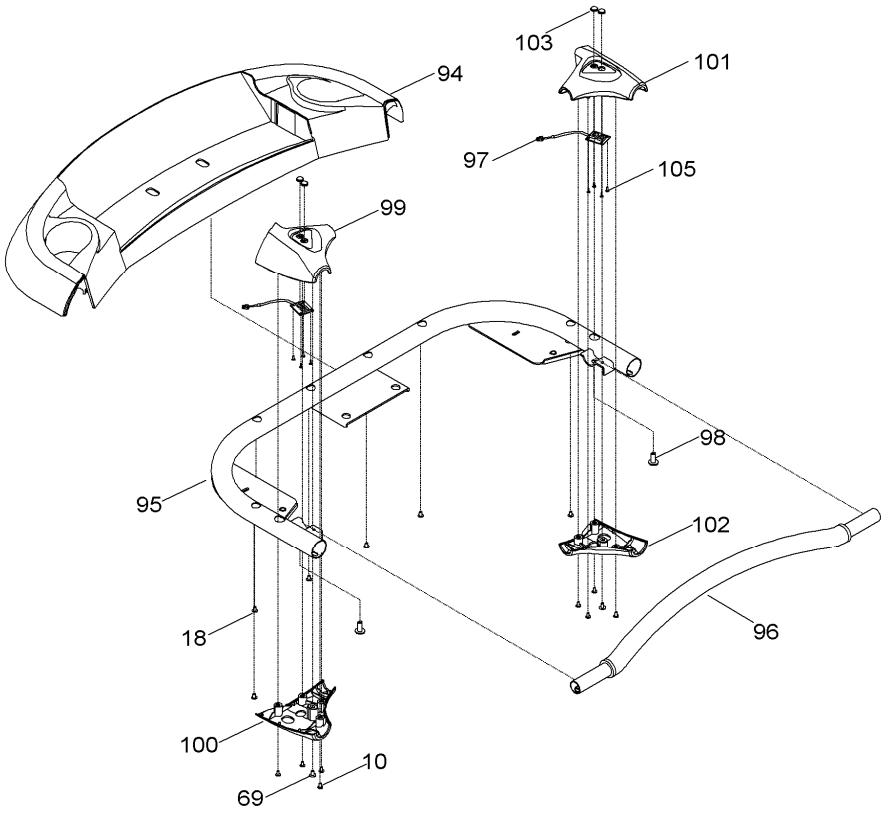
Explode dr



Section V

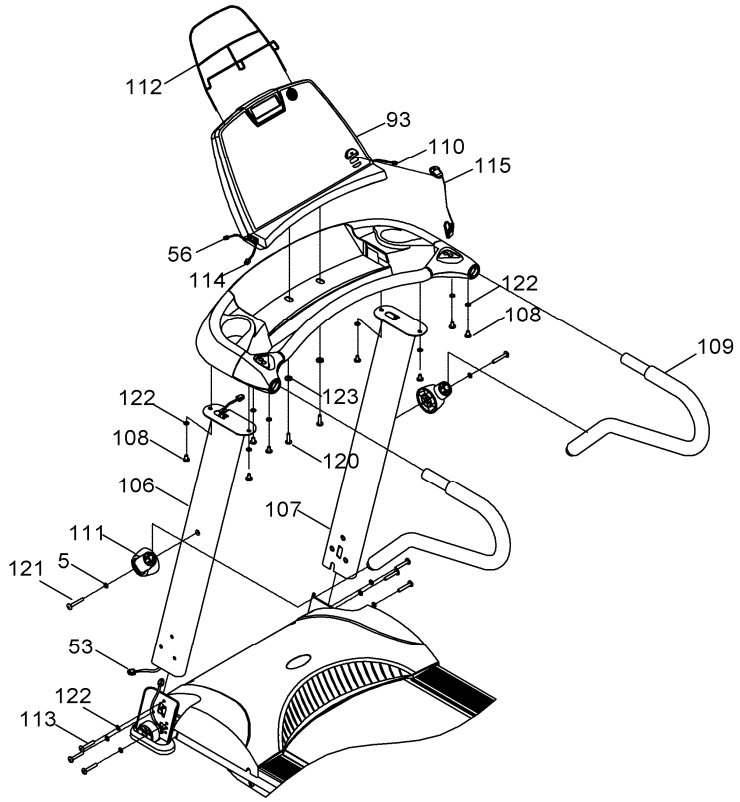
T802 (Rev. B) ***Update: 2005.09.05***





Explode drawing & part list 050905

T802 (Rev. B) ***Update: 2005.09.05***



Explode drawing & part list 050905

Section V

T802 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
1	Coating, frame, base	1
2	Screw, dome M8x55mm	2
3	Bushing, wheel	2
4	Wheel, moving	4
5	Washer, star OD15xID8.4x0.8T	7
6	Washer, flat OD17xID9x1.6T	16
7	Nut, hex, nylon M8x7.8	10
8	Cover, fix, wheel, front, L	1
9	Cover, fix, wheel, front, R	1
10	Screw, dome M4x10mm	12
11	Foot	2
12	Cable, signal, frame, main (1920mm)	1
13	Bushing, snap	2
14	Mount, tie, cable	1
15	Coating, frame, main	1
16	Cushion, deck	6
17	Bracket, stopper, side landing	2
18	Screw, dome M5x15mm	14
19	Coating, stopper, H frame	2
20	Pin, lock, rear	1
21	Spring, pin, lock	1
22	Bracket, pin, lock	1
23	Screw, dome M4x8mm	9
24	Cable, pin, lock	1
25	Foot, frame, main	2
26	Lever, release	1
27	Haft, release	1
28	Sleeve, pin, lock	1
29	Screw, dome M8x70mm	1
30	Bushing, wheel, rear	2
31	Screw, dome M8x50mm	1
32	Rubber	1
33	Coating , incline	1
Explode drawing & part list 050905		

T802 (Rev. B) ***Update: 2005.09.05***

ITEM No.	PARTS DESCRIPTION	QTY.
34	Slider, track	2
35	Bushing, tube, connection	2
36	Shaft, fixing	1
37	Washer, flat OD21xID11x2.0T	3
38	Screw, dome M8x30mm	2
39	Screw, dome M4x6mm	18
40	Assy, frame, H, L	1
41	Coating, frame, H, L	1
42	Bushing, fix, frame, base	2
43	Pin, lock, front	1
44	Screw, dome M8x45mm	6
45	Sleeve, shaft	2
46	Wheel, incline	2
47	Assy, frame, H, R	1
48	Coating, frame, H, R	1
49	Sleeve, frame, H	2
50	Cap, frame, H	2
51	Sleeve, fixing, frame, base	2
52	Motor, incline, 230V	1
52a	Assy, motor, incline, 230V	1
52b	Nut, motor, incline	1
52c	Cap, motor, incline	1
53	Cable, signal, upright (1230mm)	1
54	Screw, hex, special	2
55	Nut, hex, nylon M10x9.5	1
56	Cable, signal, extension-key (200mm)	1
57	Screw, socket M10x50mm	1
58	Inlet, AC	1
59	Breaker, circuit, 230V	1
60	Switch, power	1
61	Screw, socket M8x30mm	2

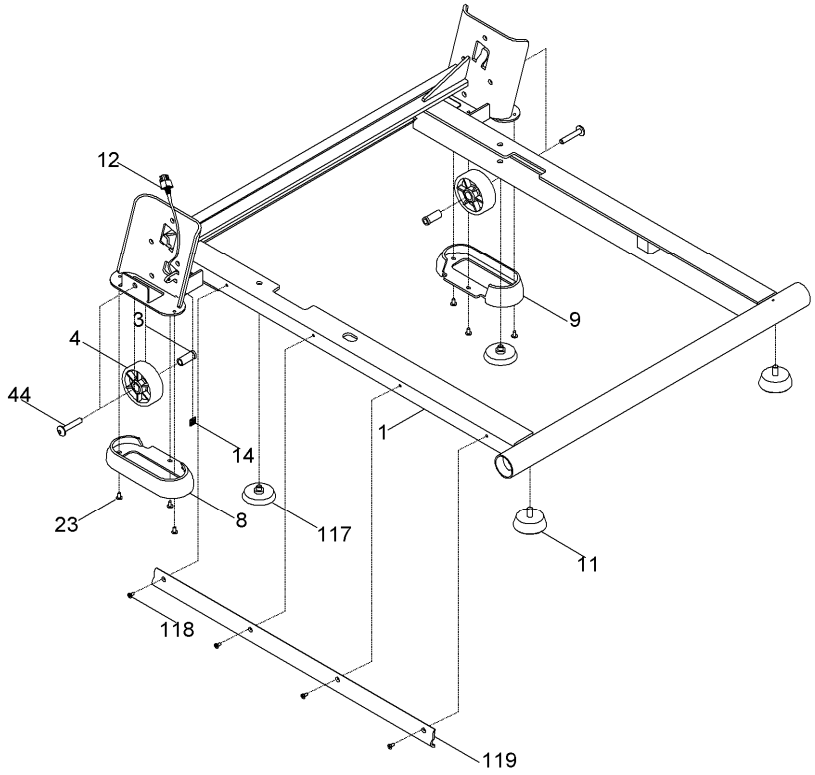
Explode drawing & part list 050905

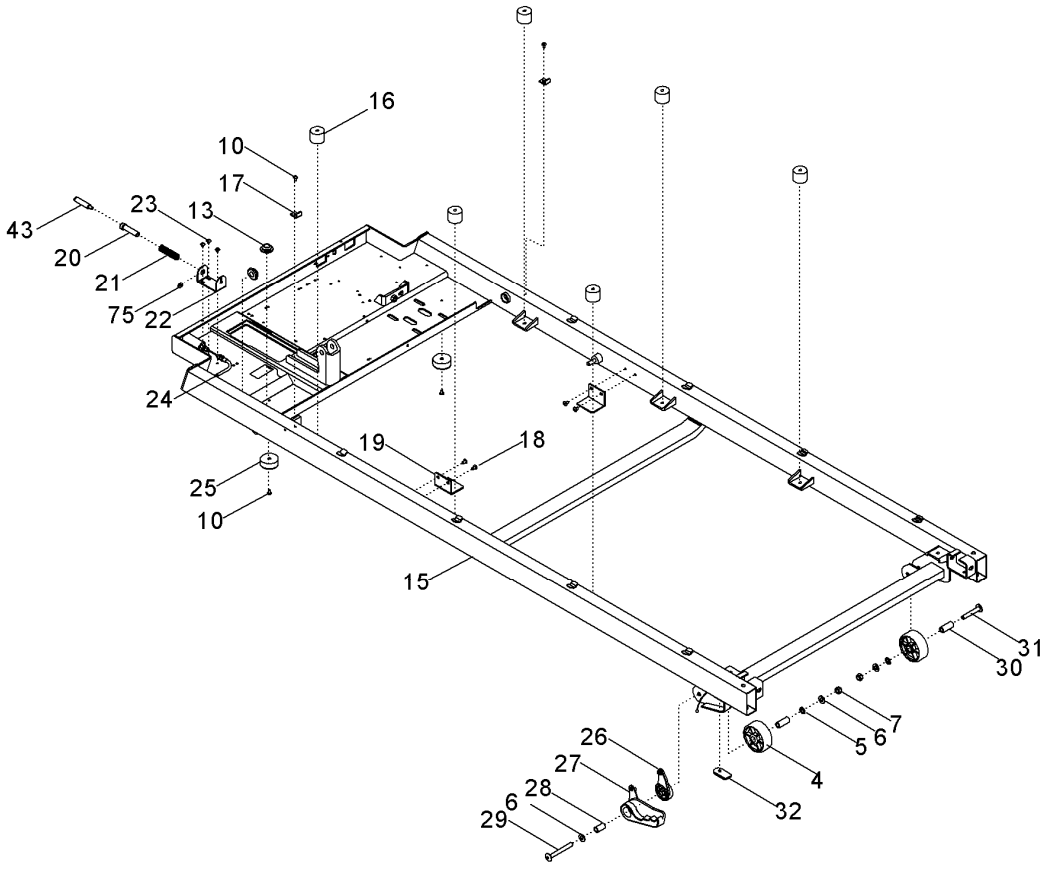
T802 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
62	Screw, socket M8x40mm	2
63	Nut, hex M8x6.5	1
64	Screw, flange M8x20mm	4
65	Weldment, bracket, motor	1
66	Motor, drive, 230V	1
67	Screw, socket M8x20mm	2
68	Sensor, speed, w/ cable	1
69	Screw, dome M5x10mm	6
70	Washer, spring OD9.2xID5.1x1.3T	2
71	Controller	1
72	Motor cover	1
73	Deck	1
74	Screw, dome M6x25mm	8
75	Washer, flat OD12.5xID6.6x1.6T	9
76	Guard, deck	2
77	Belt, running	1
78	Belt, drive	1
79	Roller, front	1
80	Washer, curve OD17xID8.5x1.5T	1
81	Roller, rear	1
82	Landing, side	2
83	Tape, foam, 1 side adhesive	4
84	Cap, frame, main, rear, top, L	1
85	Cap, frame, main, rear, btm, L	1
86	Cap, frame, main, rear, top, R	1
87	Cap, frame, main, rear, btm, R	1
88	Screw, socket M8x65mm	2
89	Screw, dome M6x10mm	2
90	Screw, dome M4x20mm	6
91	Gas shock	2
Explode drawing & part list 050905		

T802 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
92	Sleeve, gas shock	4
93	Console	1
94	Cover, base, console	1
95	Coating, bracket, console	1
96	Bar, horizontal	1
96a	Bar, horizontal	1
96b	Grip, foam, bar, horizontal	1
97	Assy, EXT-key	2
98	Screw, dome M8x20mm	4
99	Cover, bar, handle, top, L	1
100	Cover, bar, handle, btm, L	1
101	Cover, bar, handle, top, R	1
102	Cover, bar, handle, btm, R	1
103	Key, tacking	4
104	Washer, star OD8.5xID4.3x0.45T	6
105	Screw, Phillips M2.3x6mm	8
106	Coating, upright, L	1
107	Coating, upright, R	1
108	Screw, dome M8x15mm	8
109	Bar, handle	2
109a	Coating, tube, bar, handle	1
109b	Grip, foam, bar, handle	1
110	Cable, signal, EXT-key (380mm)	1
111	Cover, fixing, bar, handle	2
112	Rack, book	1
113	Screw, dome M8x50mm	6
114	Cable, signal, console (440mm)	1
115	Key, safety	1
116	Foot, front, frame, frame	2
117	Screw, countersunk M5x8mm	4
118	Jacket, cable, frame, base	1
Explode drawing & part list 050905		

T802 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
119	Screw, dome M5x10mm	1
120	Screw, dome M8x30mm	8
121	Screw, dome M8x55mm	2
122	Washer, star OD15xID8.4x0.8T	16
123	Washer, flat OD21xID11x2.0T	2
124	Sleeve, screw, Cu	1
125	Choke	1
126	Screw, Phillips M3x6mm	1
127	Washer, spring OD5xID3.3x0.8T	2
128	Filter	1
Explode drawing & part list 050905		

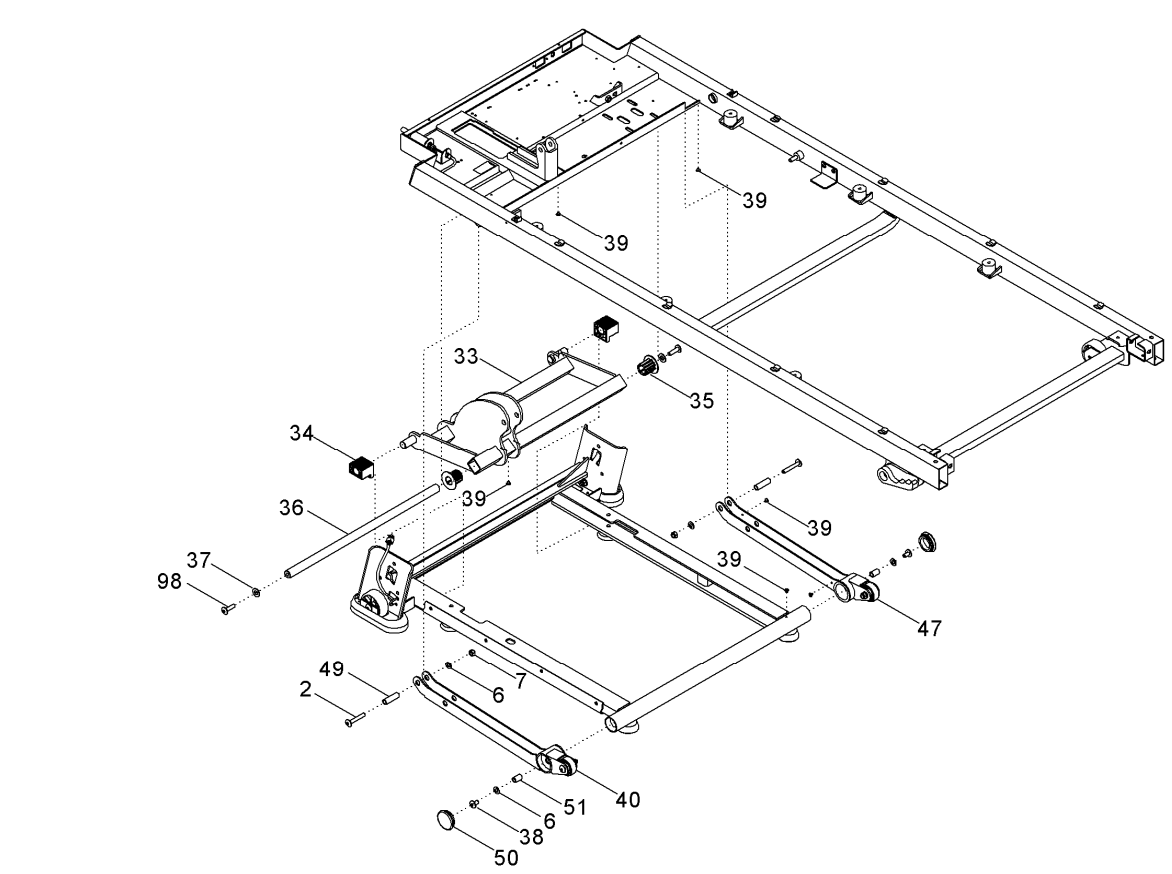
T803 (Rev. B) ***Update: 2005.09.05***

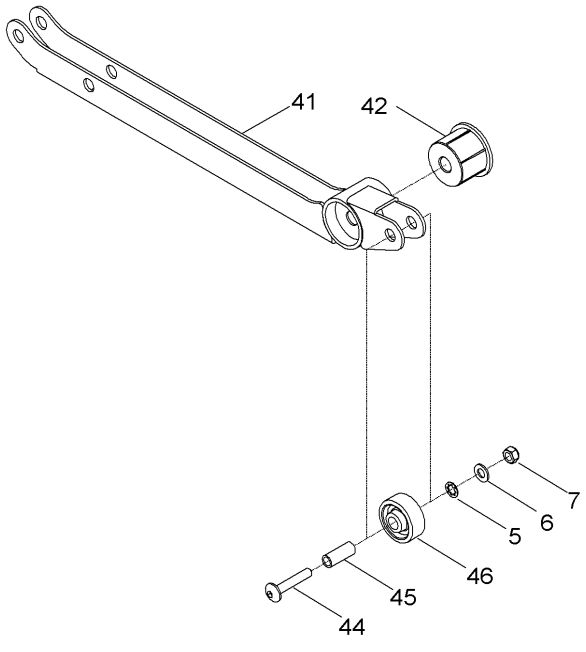


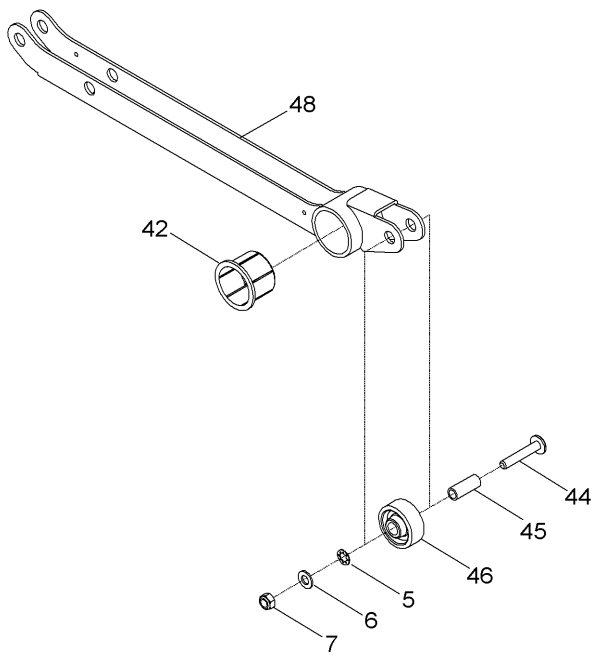


Explode drawing & part list 050905

T803 (Rev. B) ***Update: 2005.09.05***

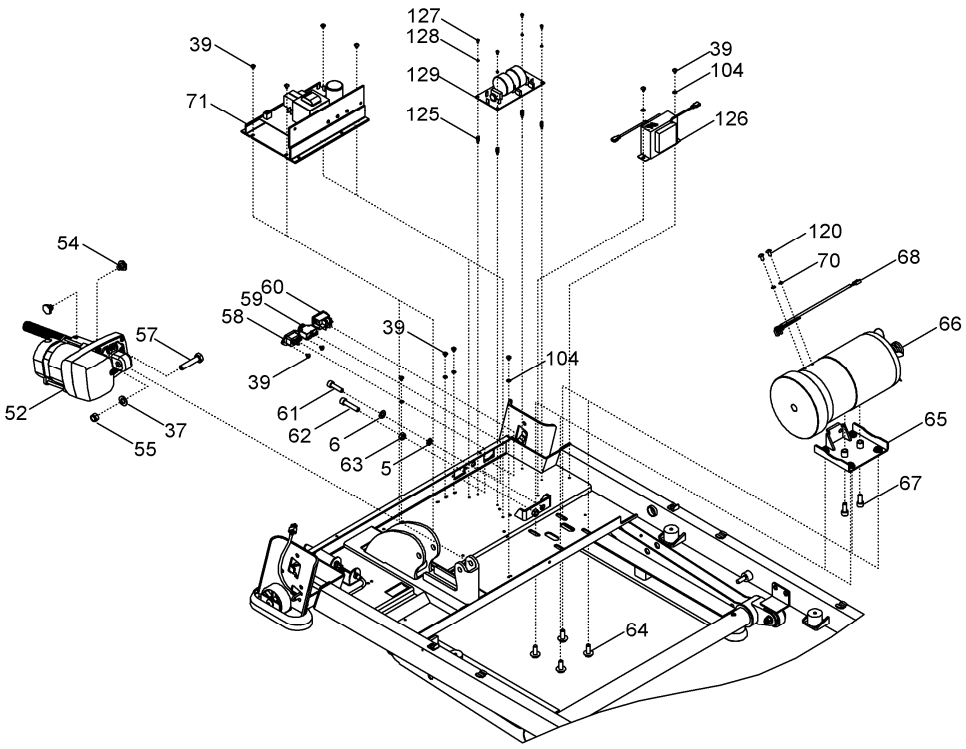


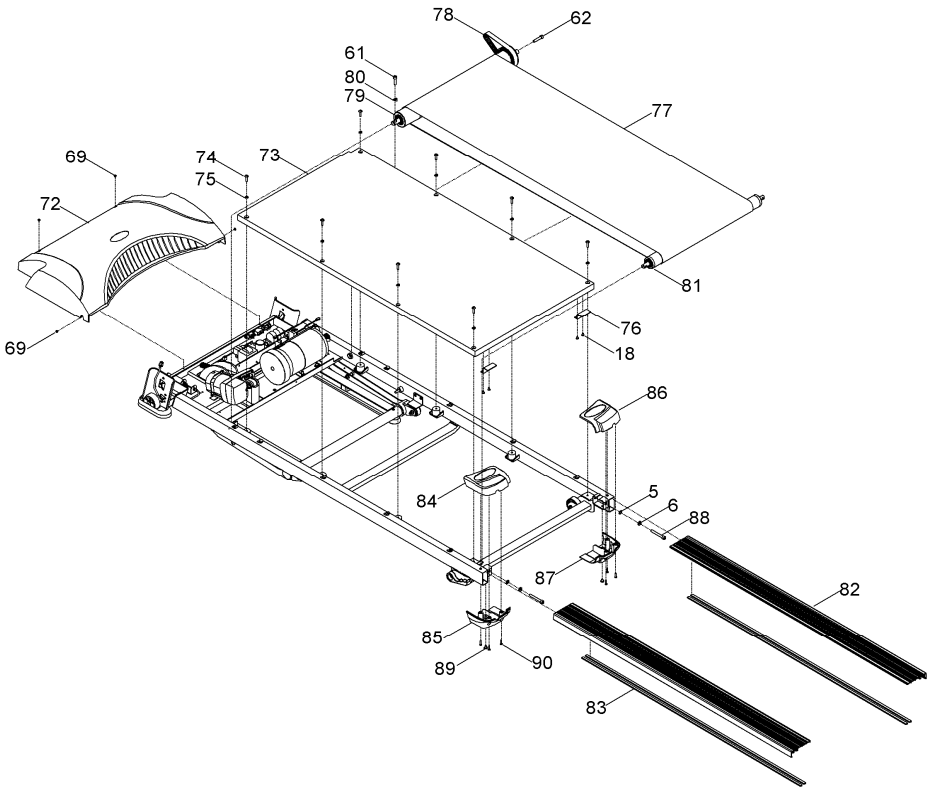




Explode drawing & part list 050905

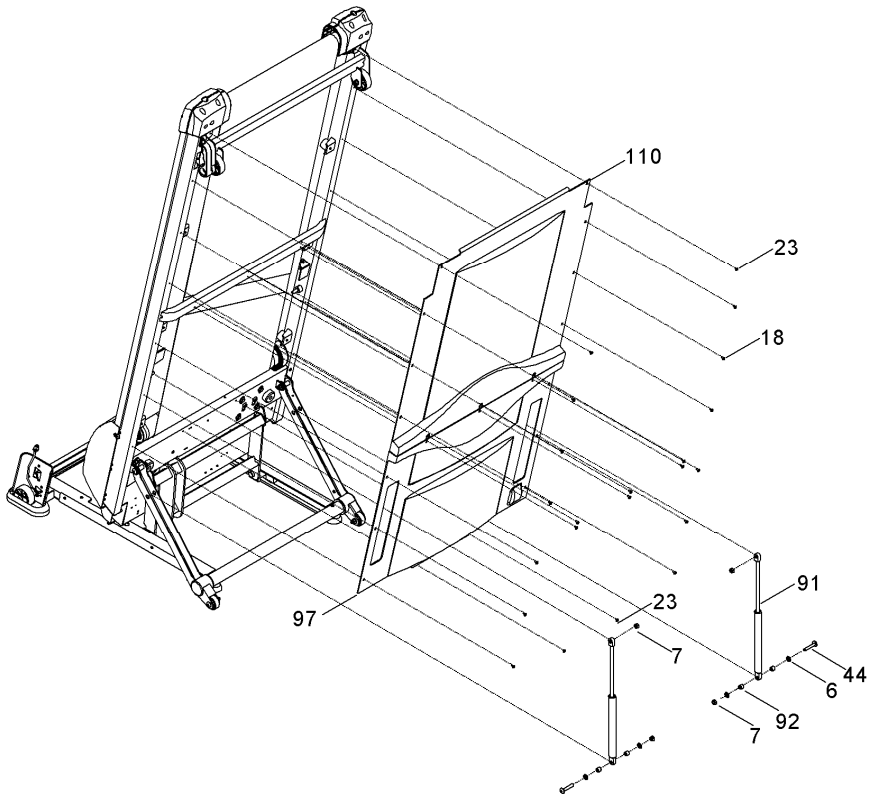
T803 (Rev. B) ***Update: 2005.09.05***

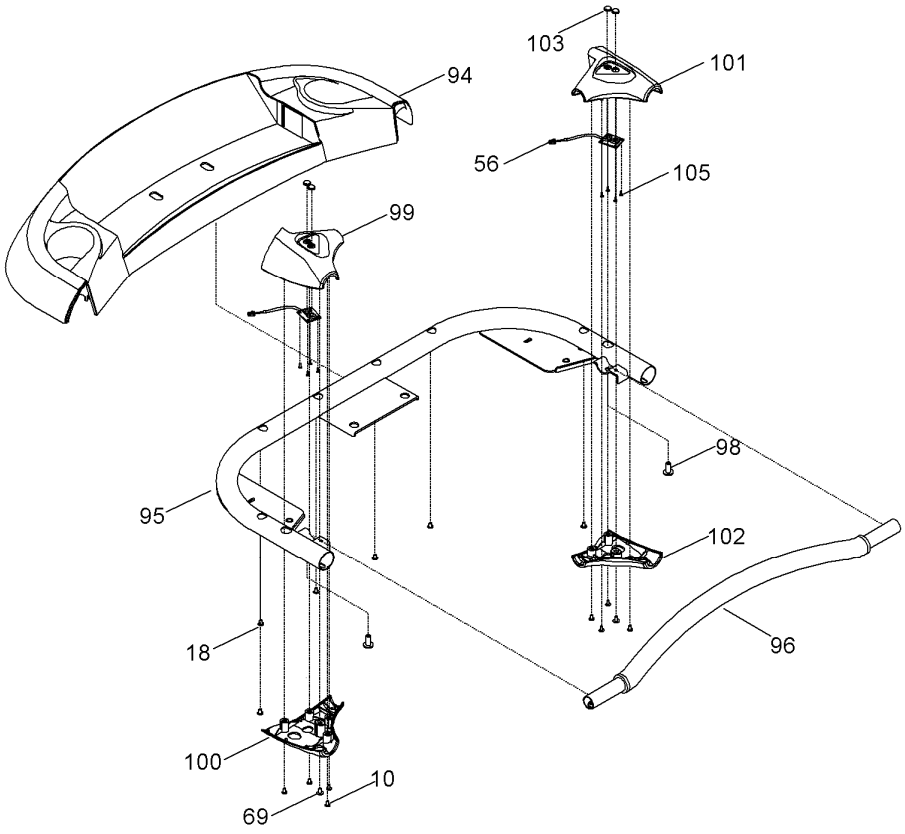




Explode drawing & part list 050905

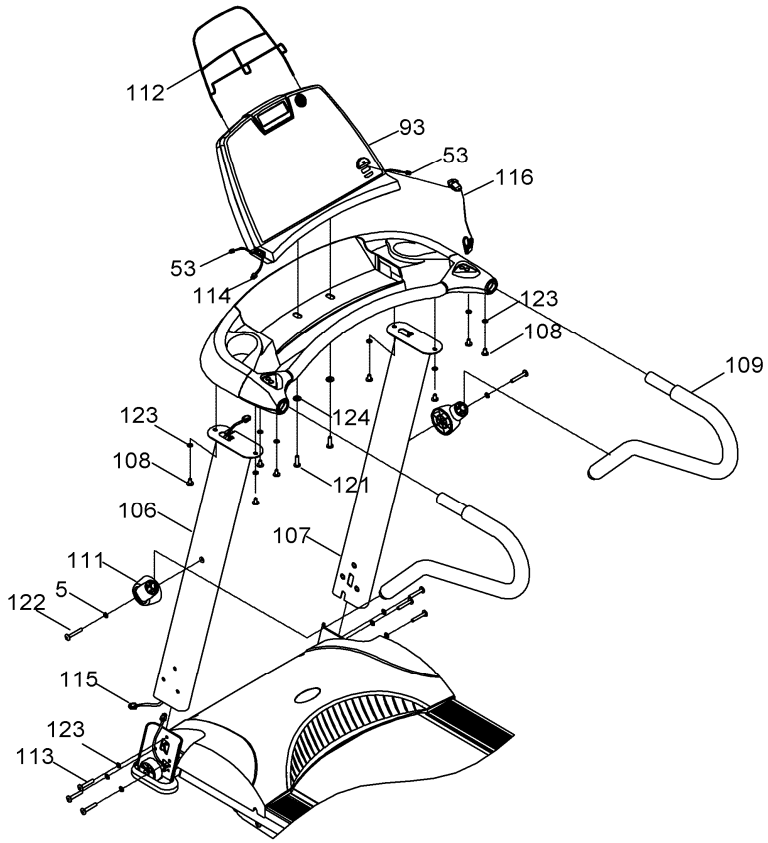
T803 (Rev. B) ***Update: 2005.09.05***





Explode drawing & part list 050905

T803 (Rev. B) ***Update: 2005.09.05***



Explode drawing & part list 050905

T803 (Rev. B) ***Update: 2005.09.05***

ITEM No.	PARTS DESCRIPTION	QTY.
1	Coating, frame, base	1
2	Screw, dome M8x55mm	2
3	Bushing, wheel	2
4	Wheel, moving	4
5	Washer, star OD15xID8.4x0.8T	7
6	Washer, flat OD17xID9x1.6T	16
7	Nut, hex, nylon M8x7.8	10
8	Cover, fix, wheel, front, L	1
9	Cover, fix, wheel, front, R	1
10	Screw, dome M4x10mm	12
11	Foot	2
12	Cable, signal, frame, main (1920mm)	1
13	Bushing, snap	2
14	Mount, tie, cable	1
15	Coating, frame, main	1
16	Cushion, deck	6
17	Bracket, stopper, side landing	2
18	Screw, dome M5x15mm	32
19	Coating, stopper, H frame	2
20	Pin, lock, rear	1
21	Spring, pin, lock	1
22	Bracket, pin, lock	1
23	Screw, dome M4x8mm	13
24	Cable, pin, lock	1
25	Foot, frame, main	2
26	Lever, release	1
27	Haft, release	1
28	Sleeve, pin, lock	1
29	Screw, dome M8x70mm	1
30	Bushing, wheel, rear	2
31	Screw, dome M8x50mm	1
32	Rubber	1
33	Coating , incline	1

Explode drawing & part list 050905

T803 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
34	Slider, track	2
35	Bushing, tube, connection	2
36	Shaft, fixing	1
37	Washer, flat OD21xID11x2.0T	3
38	Screw, dome M8x30mm	2
39	Screw, dome M4x6mm	18
40	Assy, frame, H, L	1
41	Coating, frame, H, L	1
42	Bushing, fix, frame, base	2
43	Pin, lock, front	1
44	Screw, dome M8x45mm	6
45	Sleeve, shaft	2
46	Wheel, incline	2
47	Assy, frame, H, R	1
48	Coating, frame, H, R	1
49	Sleeve, frame, H	2
50	Cap, frame, H	2
51	Sleeve, fixing, frame, base	2
52	Motor, incline, 230V	1
52a	Assy, motor, incline, 230V	1
52b	Nut, motor, incline	1
52c	Cap, motor, incline	1
53	Cable, signal, extension-key (200mm)	2
54	Screw, hex, special	2
55	Nut, hex, nylon M10x9.5	1
56	Assy, EXT-key	2
57	Screw, socket M10x50mm	1
58	Inlet, AC	1
59	Breaker, circuit, 230V	1
60	Switch, power	1
61	Screw, socket M8x30mm	2
Explode drawing & part list 050905		

T803 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
62	Screw, socket M8x40mm	2
63	Nut, hex M8x6.5	1
64	Screw, flange M8x20mm	4
65	Weldment, bracket, motor	1
66	Motor, drive, 230V	1
67	Screw, socket M8x20mm	2
68	Sensor, speed, w/ cable	1
69	Screw, dome M5x10mm	6
70	Washer, spring OD9.2xID5.1x1.3T	2
71	Controller	1
72	Motor cover	1
73	Deck	1
74	Screw, dome M6x25mm	8
75	Washer, flat OD12.5xID6.6x1.6T	9
76	Guard, deck	2
77	Belt, running	1
78	Belt, drive	1
79	Roller, front	1
80	Washer, curve OD17xID8.5x1.5T	1
81	Roller, rear	1
82	Landing, side	2
83	Tape, foam, 1 side adhesive	4
84	Cap, frame, main, rear, top, L	1
85	Cap, frame, main, rear, btm, L	1
86	Cap, frame, main, rear, top, R	1
87	Cap, frame, main, rear, btm, R	1
88	Screw, socket M8x65mm	2
89	Screw, dome M6x10mm	2
90	Screw, dome M4x20mm	6
91	Gas shock	2
Explode drawing & part list 050905		

T803 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
92	Sleeve, gas shock	4
93	Console	1
94	Cover, base, console	1
95	Coating, bracket, console	1
96	Bar, horizontal	1
96a	Bar, horizontal	1
96b	Grip, foam, bar, horizontal	1
97	Cover, back, front	1
98	Screw, dome M8x20mm	4
99	Cover, bar, handle, top, L	1
100	Cover, bar, handle, btm, L	1
101	Cover, bar, handle, top, R	1
102	Cover, bar, handle, btm, R	1
103	Key, tacking	4
104	Washer, star OD8.5xID4.3x0.45T	6
105	Screw, Phillips M2.3x6mm	8
106	Coating, upright, L	1
107	Coating, upright, R	1
108	Screw, dome M8x15mm	8
109	Bar, handle	2
109a	Coating, tube, bar, handle	1
109b	Grip, foam, bar, handle	1
110	Cover, back, rear	1
111	Cover, fixing, bar, handle	2
112	Rack, book	1
113	Screw, dome M8x50mm	6
114	Cable, signal, console (440mm)	1
115	Cable, signal, upright (1230mm)	1
116	Key, safety	1
117	Foot, front, frame, frame	2
118	Screw, countersunk M5x8mm	4
Explode drawing & part list 050905		

T803 (Rev. B)		*Update: 2005.09.05*
ITEM No.	**PARTS DESCRIPTION**	**QTY.**
119	Jacket, cable, frame, base	1
120	Screw, dome M5x10mm	2
121	Screw, dome M8x30mm	2
122	Screw, dome M8x55mm	2
123	Washer, star OD15xID8.4x0.8T	16
124	Washer, flat OD21xID11x2.0T	2
125	Sleeve, screw, Cu	4
126	Choke	1
127	Screw, Phillips M3x6mm	4
128	Washer, spring OD5xID3.3x0.8T	4
129	Filter	1
Explode drawing & part list 050905		

SECTION VI

MISCELLANEOUS INFORMATION

PREVENTIVE MAITENANCE TIPS

Preventive Maintenance Schedule

ITEM	WEEKLY	MONTHLY	QUARTERLY	BI-ANNUAL	ANNUAL
DISPLAY CONSOLE ASSEMBLEY					
Hardware				Inspect	
Overlay	Clean			Inspect	
Emergency Switch/Key	Clean			Inspect	
HANDLEBAR ASSEMBLY					
Hardware				Inspect	
Handlebar				Inspect	
Side Hand Rails				Inspect	
FRAME ASSEMBLY					
Hardware				Inspect	
Motor Cover	Clean				
Drive Belt				Inspect	
Front Roller				Inspect	
Rear Roller				Inspect	

CAUTION: For your own safety, be sure to fold up the deck before removing the treadmill from the carton.

1. Remove the computer console box and uprights set carefully.

2. Remove all the packaging materials.

3. Find and read the assembly instructions before assembling the treadmill.

4. Assemble the treadmill according to assembly instructions.

5. Fold up and move out the treadmill from carton packaging.

IMPORTANT SAFETY INSTRUCTIONS !

⇒ ***DO NOT*** *position the rear of the treadmill within 6 feet (2 meter) of the nearest obstruction. The sides of the treadmill should maintain a minimum clearance of 8 inches (20 cm) from the nearest treadmill or other obstruction.*

⇒ ***DO NOT*** *locate the treadmill outdoors, near swimming pools, or in areas of high humidity.*

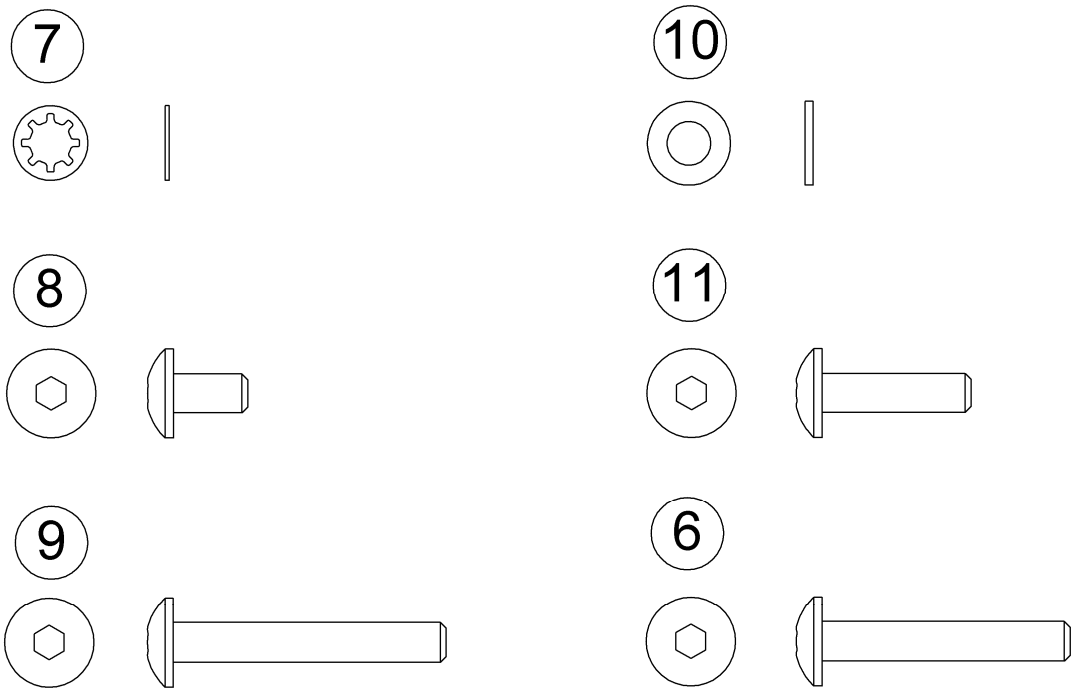
⇒ ***DO*** *verify the contents of the delivery carton against the accompanying parts listing prior to setting the cartons and shipping material aside. If any part is missing, contact Customer Support Services at the number listed on the back page of this assembly instruction booklet.*
Save the shipping cartons in case of return.

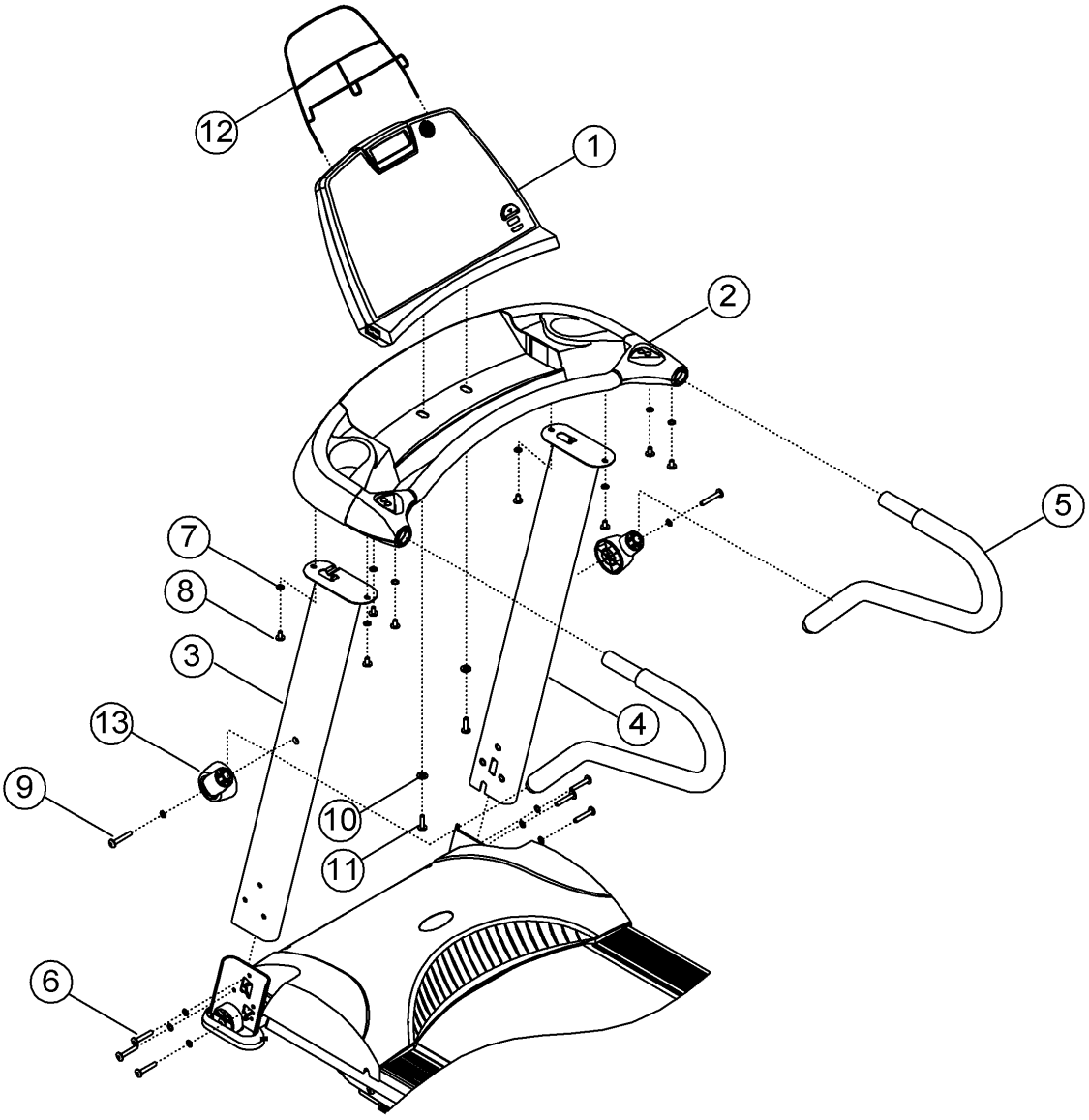
⇒ ***DO*** *read the entire Operation Manual prior to attempting to operate this machine, as this is essential for proper use. The Manual explains how to properly use the treadmill and helps you design an aerobic workout tailored to your personal fitness needs or requirements.*

TOOLS REQUIRED FOR ASSEMBLEY…
6mm Allen Key (provided)

T802/ T803 PARTS DESCRIPTION

1	CONSOLE	**Qty: 1**
2	CONSOLE BASE	**Qty: 1**
3	LEFT UPRIGHT POST	**Qty: 1**
4	RIGHT UPRIGHT POST	**Qty: 1**
5	HANDLE BAR	**Qty: 2**
6	SCREW DOME HEAD M8x50mm	**Qty: 6**
7	WASHER, STAR M8x0.8mm	**Qty: 16**
8	SCREW DOME HEAD M8x15mm	**Qty: 8**
9	SCREW DOME HEAD M8x55mm	**Qty: 2**
10	WASHER, FLAT M10x2mm	**Qty: 2**
11	SCREW DOME HEAD M8x30mm	**Qty: 2**
12	BOOK RACK	**Qty: 1**
13	HANDLE BAR FIXING COVER	**Qty: 2**



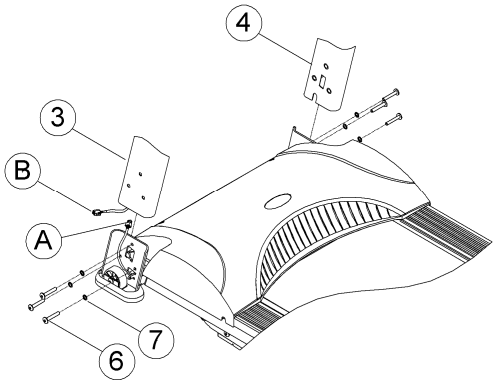

12
1
2
5
7
8
3
4
13
9
10
11
6

IMPORTANT! DO NOT DISCARD THE SHIP KIT LOCATED ON TOP OF THE DECK AND BELT. ALL NECESSARY COMPONENTS NEEDED TO COMPLETE THE INSTALLATION ARE LOCATED IN THE SHIP KIT.

Only one tool is required to assemble the treadmill.
This tool is provided along with the bolt pack. Keep the tool to tension the running belt in the future.

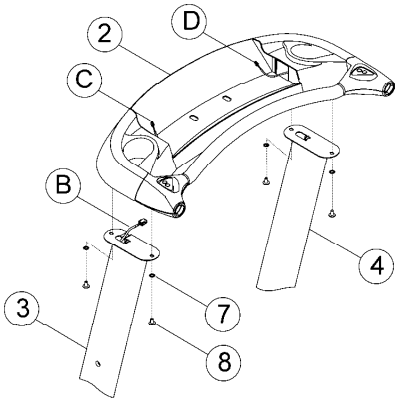
1. ASSEMBLE THE UPRIGHT POSTS

Connect the cable(A) with (B) before you assemble the upright posts to the base frame Secure upright posts(3)&(4) with six screws (6) and six washers(7).



2. ASSEMBLE THE CONSOLE BASE

Pull the cable(B) through the console base(2) carefully. Then secure the console base (2) to the upright posts(3)&(4) with four star washers (7) and four screws(8)
Be careful not to pinch or damage the cable.

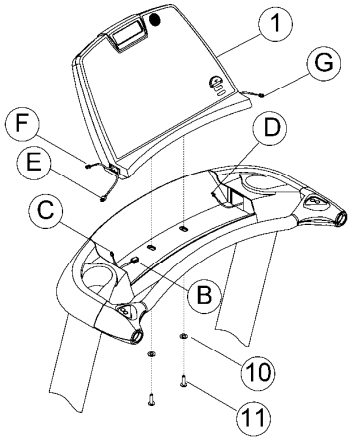


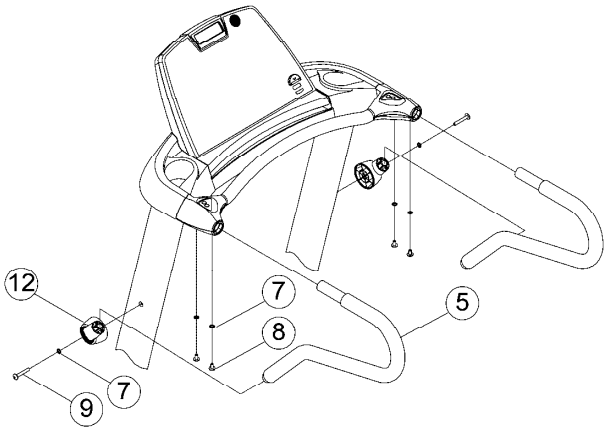
3. ASSEMBLE THE CONSOLE

Do not pull on the cable (E),(F) and (G)
Set the console(1) on the console base by aligning the two pins. Once you have the console(1) in place, secure and tighten two screws(11) and two flat washers(10).
Connect the cable(C) with (F), cable(D) with (G) and cable(B) with (E).

4. ASSEMBLE THE HANDLE BAR

Insert the two handle bars(5) into console base and two handle bar fix covers(12) in place, secure and tighten the screws(9) and star washers(7). Screw the handle bars(5) to console base with the screws(8) and the star washers(7).



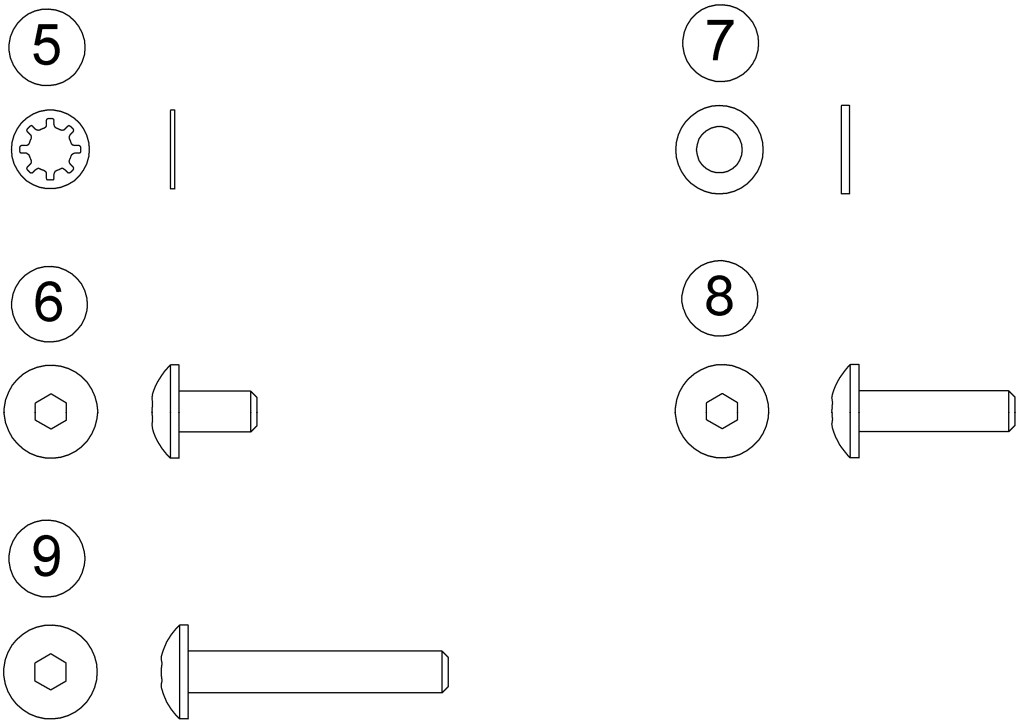


Section VI

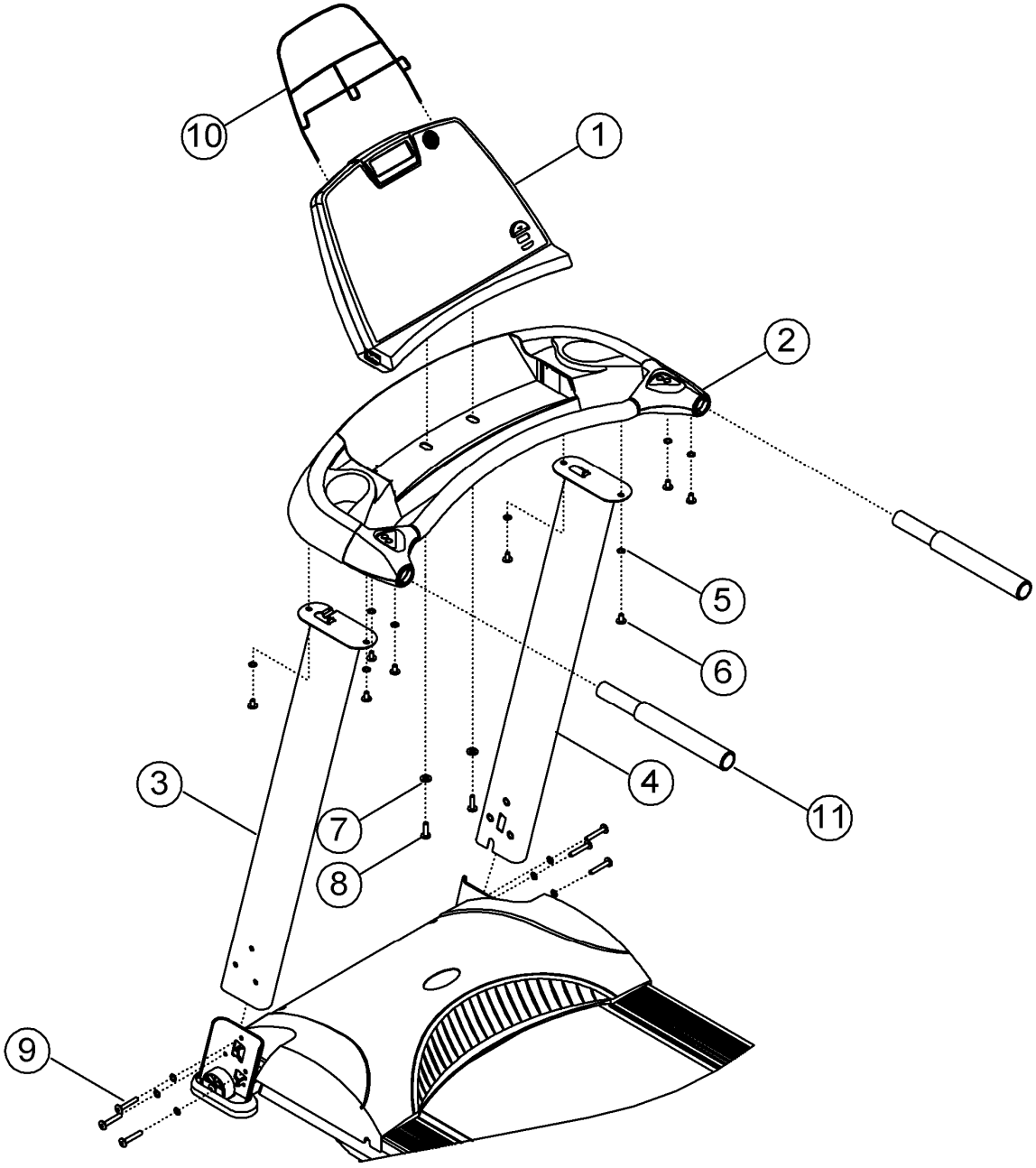
TOOLS REQUIRED FOR ASSEMBLEY…
6mm Allen Key (provided)

T801 PARTS DESCRIPTION

1	CONSOLE	**Qty: 1**
2	CONSOLE BASE	**Qty: 1**
3	LEFT UPRIGHT POST	**Qty: 1**
4	RIGHT UPRIGHT POST	**Qty: 1**
5	WAHSER, STAR M8x0.8mm	**Qty: 14**
6	SCREW DOME HEAD M8x15mm	**Qty: 8**
7	WASHER, FLAT M10x2mm	**Qty: 2**
8	SCREW DOME HEAD M8x30mm	**Qty: 2**
9	SCREW DOME HEAD M8x50mm	**Qty: 6**
10	BOOK RACK	**Qty: 1**
11	HANDLE BAR	**Qty: 2**
12	HANDLE BAR FIXING COVER	**Qty: 2**

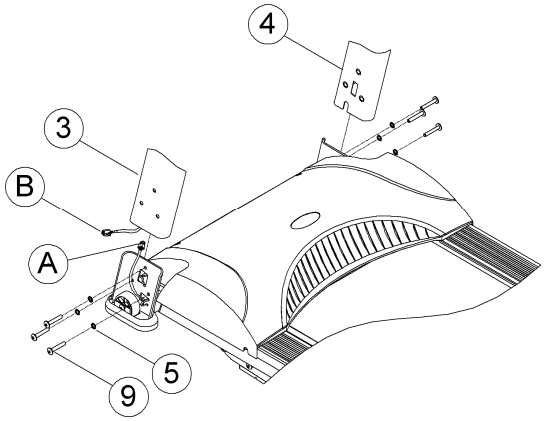


IMPORTANT! DO NOT DISCARD THE SHIP KIT LOCATED ON TOP OF THE DECK AND BELT. ALL NECESSARY COMPONENTS NEEDED TO COMPLETE THE INSTALLATION ARE LOCATED IN THE SHIP KIT.



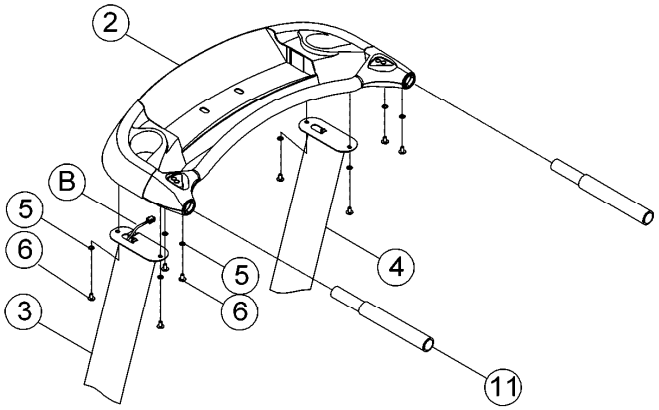
IMPORTANT! DO NOT DISCARD THE SHIP KIT LOCATED ON TOP OF THE DECK AND BELT. ALL NECESSARY COMPONENTS NEEDED TO COMPLETE THE INSTALLATION ARE LOCATED IN THE SHIP KIT.

Only one tool is required to assemble the treadmill.
This tool is provided along with the bolt pack.
Keep the tool to tension the running belt in the future.



1. ASSEMBLE THE UPRIGHT POSTS

Connect the cable(A) with (B) before you assemble the upright posts to the base frame
Secure upright posts(3)&(4) with six screws (9) and six washers(5)

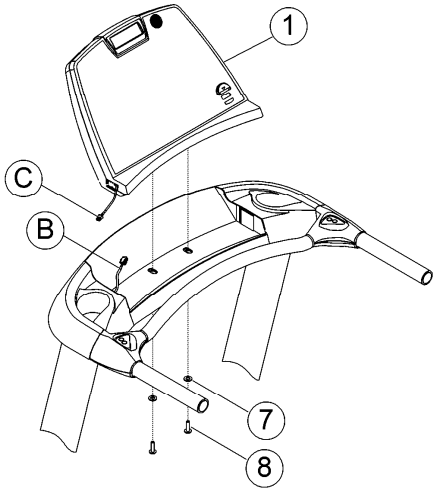


2. ASSEMBLE THE CONSOLE BASE

Pull the cable(B) threw the console base(2) carefully. Then insert the two handle bar(11) into the console base with four star washers (5) and four screws(6). Secure the console base(2) to the upright posts(3)&(4) with four star washers (5) and four screws(6)
Be careful not to pinch or damage the cable.

3. ASSEMBLE THE CONSOLE

Set the console(1) on the console base.
Once you have the console(1) in place, secure and tighten two screws(8) and two flat washers(7)
Connect the cable(C) with (B).



Section VI

COMMUNICATING BY FAX

I*f you would like to submit a part order, or if you need help troubleshooting a problem, we have included, for your convenience, a FAX form on the following page. Simply make a copy (or copies) of the FAX sheet and fill in the necessary information. You may FAX us at any time, 24 hours a day, to either of the numbers shown. A HS service representative will process your order, or respond to your problem, as quickly as possible.*

IMPORTANT! DO NOT DISCARD THE SHIP KIT LOCATED ON TOP OF THE DECK AND BELT. ALL NECESSARY COMPONENTS NEEDED TO COMPLETE THE INSTALLATION ARE LOCATED IN THE SHIP KIT.

☐ **PARTS ORDER** (IF BOTH PLEASE INDICATE) ☐ **SALE**

☐ **PRODUCT TROUBLESHOOTING** ☐ **WARRANTY**

NAME:	**CUSTOMER NO:**	**DATE:**
PHONE:	**FAX:**	**CONTACT NAME:**

METHOD OF SHIPMENT: ☐ **1 DAY** ☐ **2 DAY** ☐ **GROUND**

PARTS ORDER FORM

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1			
2			
3			
4			
5			
6			

PRODUCT TROUBLESHOOTING

PRODUCT NAME:	**SERIAL NO.**
DETAILED DESCRIPTION OF PROBLEM:	
PRODUCT NAME:	**SERIAL NO.**
DETAILED DESCRIPTION OF PROBLEM:	

TIME RECEIVED:	**TIME COMPLETED:**	**TECHNICIAN NAME:**

Healthstream Taiwan Inc.
CUSTOMER SUPPORT SERVICES

Address: 16-3, Zichiang 1st Road
Jhongli, Taoyuan 32063 Taiwan R.O.C.
Phone: 886.3.433.6269
FAX: 886.3.733.6259

NOTES: