True Fitness Service Manual

Elliptical Trainers

750E 750EA 600EA

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Recommended Tool List

Technicians will need at minimum the tools listed below to work on the True Fitness equipment covered by these procedures.

Electrical Tools

A multi meter capable of testing voltage, amperage, resistance and continuity.

Outlet tester with a grounding indicator.

Wire stripper, cutter and crimper.

Flashlight

Mechanical Tools

Screwdrivers:

#1 Phillips, #2 Phillips, large flat blade, small flat blade, short handled flat blade.

Metric hex-key (Allen wrench) set.

Metric socket set and ratchet with 6mm to 19mm sizes and 21mm and 34mm sizes.

Metric combination wrenches with 4mm to 21mm sizes and a 27mm El crank.

Snap ring pliers, both internal and external.

True Fitness Elliptical 2 19/32 Wrench pn: 90361501

Rubber mallet.

Channel lock pliers or standard pliers with a jaw opening of 2 9/16" for use in removing and tightening sleeve nuts.

Needle nose pliers.

Crescent wrench

Special Tool

Bicycle crank puller Park Tool USA CCP-2



True Fitness Elliptical Service Manual

START

- **❖Symptom guide**
- **❖**Wiring Diagrams
- **Parts Manual**
- **❖ Removal and Replacement Procedures**

Te	est Mode *750 ONI	Y Procedure
D I	To Enter Diagnostic Mode Console / Display Output	 Press and hold the "Start" key as you begin pedaling. Continue pedaling throughout the test. Press "Enter" key – initiates the second LED function test. Press "Enter" key again –all LED's should be on.
A G	RPM	 Press "Enter" key – RPM's displayed in the far right window.
N O	Console Key Input	Press "Enter" key –A beep should sound when each key is pressed.
S T	Contact Heart Rate	Press "Enter" key. Hold both handle pick-ups. Heart symbol will flash and readout will display.
I C	DA (Resistance)	 Press "Enter" key – Press + to increase resistance and – to decrease resistance.
S	Exit Diagnostics	To quit diagnostics press "Enter" key or stop pedaling and the unit will reset.

SYMPTOM GUIDE

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<u>750</u>	E,750EA
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0	No Polar Heart Rate Page 9
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_	Squealing / Screeching from Aluminum Extrusion Tubes Page 12

Symptom	Probable Cause	Corrective Action	Recommended Tools
NO RESISTANCE 750E, 750EA	Console Set Defective Cables Power Resistance	Remove console bolts to access 7-pin connector. Do not disconnect console set. Enter DA (resistance) test mode. (Page 3). Press + key to force .7 VDC out of panel. Set meter for DC Volts. Measure between #2 pin and #4 pin at 7- pin connector. Is .7 VDC present? No- replace console set. If present, continue on. Remove right mast cover and handlebar. Measure between the #2and #4 wires at the 7-pin connector on the lower board. Is .7 VDC present? No- replace cable for console. If present, continue on. DO NOT PEDAL. Set meter for resistance. Disconnect 3-pin connector at the lower control board. Measure resistance between #1 pin and #3 pin. Resistance should be 10 ohms, +/- 1 ohm. If less than 10 Ohms- replace power resistance. If resistance checks OK, continue on. DO NOT PEDAL. Remove main body cover, set meter for continuity. Disconnect brake cable from brake and lower board. Check continuity of all wires in cable. Check for cross continuity- this would indicate multiple shorts in the cable. No continuity? Replace Brake cable. Yes continuity? Replace lower board.	Note: You must pedal at least 30 RPM when performing any voltage test. You may require the assistance of another person when performing voltage checks. Multi-meter

Symptom	Probable Cause	Corrective Action	Recommended Tools
HEAVY RESISTANCE 750E, 750EA	NCE	 Check for foreign objects causing mechanical binding. Remove foreign objects. 	Multi-meter
	Console Set	 Remove the console set. Disconnect the 7-pin connector from the back of the console set. Pedal. Resistance normal? Replace console set. 	
	Defective Cables	 Remove right side handle bar assembly and mast cover. Disconnect 7- pin connector from the lower control board. Pedal. If resistance is normal- replace cable for console. 	
	Lower control Board/ Brake	 Remove main body cover. Disconnect 3- pin connector from the brake. Resistance still heavy- Replace brake. Resistance normal Check brake cables for cross continuity. Replace lower control board. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
No Display 750E, 750EA	Console Set	 Remove console set bolts. Verify good connection at the back of the console set. Set meter for DC volts Pedal. Measure between #1 and #4 wires for 5.5 – 7.5 VDC. Is required voltage present? If yes- replace console set. If not, continue on. 	Note: You must pedal at least 30 RPM when performing any voltage test. You may require the assistance of another person when performing voltage checks.
	Brake	 Remove right side bar assembly, right mast cover and main body cover. Disconnect 3- wire connector at brake. Set meter for AC volts. Pedal. The voltage should increase as pedaling increases. Is minimum voltage 9 VAC @ 30 RPM? If No- replace Brake. If yes, continue on. 	Multi-meter
	Defective Cable	 Remove right side bar assembly, right mast cover and main body cover. Disconnect 3- wire cable from brake and lower control board. Set meter for continuity. Check all 3 wires in cable for continuity. No continuity? Replace cable 	
	Console Cable/ Lower Control Board	 Set meter for DC volts. Reconnect cable to brake and lower control board. Pedal. Measure for 5.5 – 7.5 VDC between #1 and #4 wires on 7- pin cable for the console at the lower control board. Voltage is present? Replace cable for console. Voltage not present? Replace lower control board. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
NO CONTACT HEART RATE 750E, 750EA	Dirty Sensors	Verify hand pulse sensors are clean	Note:
	Console Set/ Wiring	 Set meter for continuity. Remove Console set. Check for continuity in both sets of hand pulse sensors between the console set and hand pulse sensor plates. If continuity is OK – Replace Console set. If no- continue on. 	You must pedal at least 30 RPM when performing any voltage test. You may require the assistance of another person when performing voltage checks. Multi-meter Double sided tape
	Wire Connections	 Check wire connections @ handlebar console mast joint Check connections of wires to hand pulse sensor by removing hand pulse sensor plates. To remove hand pulse sensor plates carefully pry under one end to free them from the plastic handgrips. Bad connections? - Reconnect/ Replace bad wires. Recheck continuity. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
NO POLAR HEART RATE 750E, 750EA 600EA.	Control Panel	 Attach heart rate simulator around chest or use Polar simulator. Do not touch the hand pulse sensors. Start pedaling Check display for heart rate. 	You must pedal at least 30 RPM when performing any voltage test. You may require the assistance of another person when performing voltage checks.
	Defective Cables	 Does console display heart rate with the chest strap? Does console display heart rate with HR simulator? If unit responds with simulator and not chest strap then replace chest strap. If unit does not respond with strap or simulator then replace Console set. 	Excessive radio, electromagnetic or audible noise can cause poor heart rate reception.

Symptom	Probable Cause	Corrective Action	Recommended Tools
VIBRATION FROM DRIVE TRAIN 750E, 750EA 600EA.	Belt Tension	 Remove main body cover. Check poly V- belt for bumps- if bump exists, replace the belt. Check for proper belt tension. Belt should be very tight, grasp belt in the middle and twist, you should only be able to twist it 90 degrees. 	Long handled screwdriver
	Brake Vibration	 Pedal. Very carefully check brake for vibration, use <u>caution</u> as the moving arms cross in front of the brake. If vibration is found- tighten bolts and /or replace brake. 	
	Wobbling Pulleys	 Does pulley of either poly V- wheel wobble? If so then tighten bolts. If tightening does not resolve- replace damaged poly-v- wheels. 	
	Shaft Vibrations	 Check shaft assemblies. Check for endplay on shaft assemblies. Check for vibration in shaft assemblies by applying screwdriver to frame at shaft bearings. If vibration is found- replace shaft assembly. Caution: When checking for vibrations take care to not get caught by the pulleys, belts and moving parts.	
	Vibrating Bearings	 Check belt tensioned. Use screwdriver method to check bearings on wheel shaft. Replace tension wheel assembly. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
KNOCKING IN RHYTHM OF PEDALING	Probable Cause Crank and Shaft Swing Arm Bearings	Remove main body cover. Check crank arm nuts for tightness. Is noise coming from the crank area If yes – remove crank, check shaft and crank for damage. Replace parts as needed Check the moving arm bearing for noise. Tighten nut and check for noise. If noise continues – replace moving arm assembly.	Multi-meter 14mm socket 21mm socket 27mm socket

Symptom	Probable Cause	Corrective Action	Recommended Tools
SQUEALING / SCREECHING FROM ALUMINUM EXTRUSION TUBES 750E, 750EA, 600EA.	Cleaning Aluminum Extrusion Tubes	 Remove aluminum extrusion tubes. Clean tracks with general purpose cleaner. DO NOT USE PETROLIUM BASED CLEANERS – it will degrade the rollers. Clean roller. 	Non- petroleum based cleaner. (For example: Simple Green)
	Checking Rollers	 Check rollers for bumps and flat spots. Do rollers spin freely? If rollers do not spin freely – replace rollers. 	
	Moving Arm Travel	 Do the moving arms run straight down the aluminum extrusion tubes? If no – loosen nut on cubic joint. If no help – replace moving arm assembly. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
RESISTANCE MALFUNCTION 600EA	Console Set	 Remove console bolts to access 7-pin connector. Do not disconnect console set. Set meter for DC Volts. Measure between pin 1(red) and pin 5(blue) at 7-pin connector. Enter DA (resistance) test mode. Page SG-1. Press + key to force .9 VDC out of panel. Press + to check voltage at all levels. Is voltage displayed on meter approximately the same as voltage displayed in heart rate window? Noreplace console set. Yes, continue on. 	You must pedal at least 30 RPM when performing any voltage test. You may require the assistance of another person when performing voltage checks. Multi-meter
	Lower Board / Brake Cable	 Remove main body cover & locate the cable connecting the brake and the lower control board. Set meter to DC volts. Check DC voltage between pins 2 and 4 of the power supply Is voltage is same as shown in heart rate window? If NO – go to console cable. Check voltage at the 2-pin connector at the brake. Press + to increase resistance and voltage. Does the voltage start at 3.7 and increase to 30 VDC? If no- check continuity of cable. If cable is broken replace it, if cable is good – replace the lower board. 	
	Brake Coil	• Set meter to resistance and check the coil. Coil resistance should be 15 ohms, + or – 2 Ohms. If not then replace the coil.	
	Console Cable	 Set meter to resistance; perform continuity check on wire harness. Check for cross continuity. Broken wires? Replace cable. 	

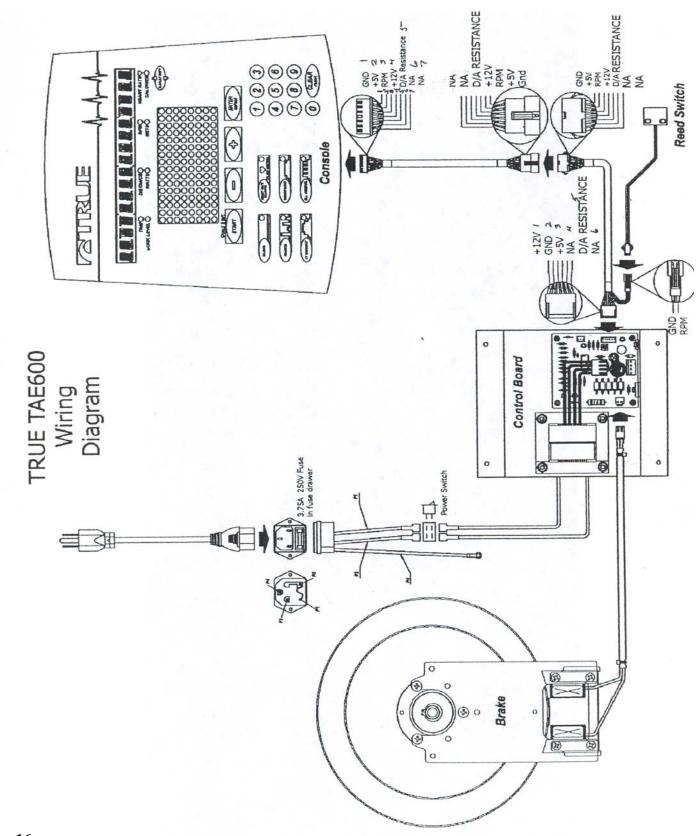
Symptom	Probable Cause	Corrective Action	Recommended Tools
NO DISPLAY 600EA	Power Issues	 Set meter to AC voltage and test wall outlet to 120 VAC. Turn power switch on Does power switch lamp come on? Yes – go to control panel. No- remove rear cover. Check voltage input to switch, is it 120 VAC? If yes – replace switch. If no – continue on. Check voltage at end of power cord. No voltage? Replace cord. Check fuse in power inlet. Replace fuse or replace power inlet and wires. 	Multi-meter
	Control Panel	 Check connection to the display. Reseat connection. Set meter to DC volts, unplug display and check voltage between pin 1 and pin 2. If 12VDC is present – replace control panel. 	
	Power Supply	 Check voltage between pin 2and pin 3at the power supply. If 12 VDC present – replace power supply. 	
	Cables	 Perform a continuity check on the cables leading to the control panel. Replaced damaged cables. 	

Symptom	Probable Cause	Corrective Action	Recommended Tools
NO SPEED READING 600EA	Console Assembly	 Remove monitor bolts. Move the swing arms until the magnet is in front of the sensor. Set meter for DC volts. Check voltage between pin 3 and pin 1 at console assembly with cable connected. Move swing arms. When magnet is over the pickup the voltage should be 0 VDC. When the magnet is not over the pickup, the voltage should be 5 VDC. Does the voltage alternate between 0 VDC and 5 VDC? If yes – replace console assembly. 	Multi-meter
	RPM Sensor	 Turn power off, remove rear cover Disconnect the sensor connector. Set meter for resistance. Check resistance at the 2 pins of the connector. Slowly move the swing arms to rotate the wheel. Does the meter show continuity when the magnet is over the pickup? If no – replace the sensor. 	
	Defective ECB Control Board	 Perform a continuity and contact check on the console wire. Replace defective wire. 	

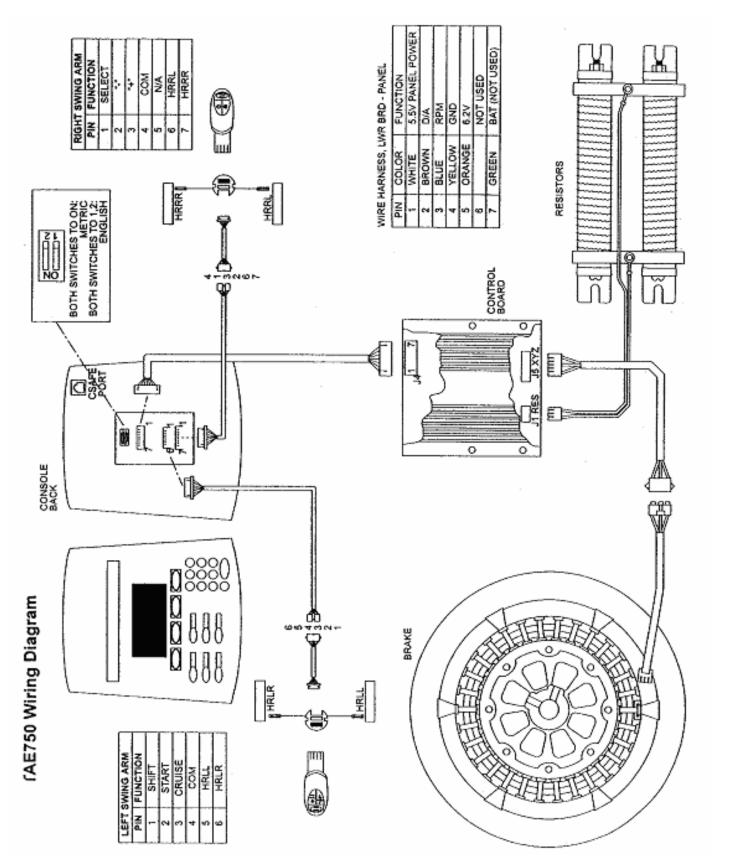
WIRING DIAGRAMS

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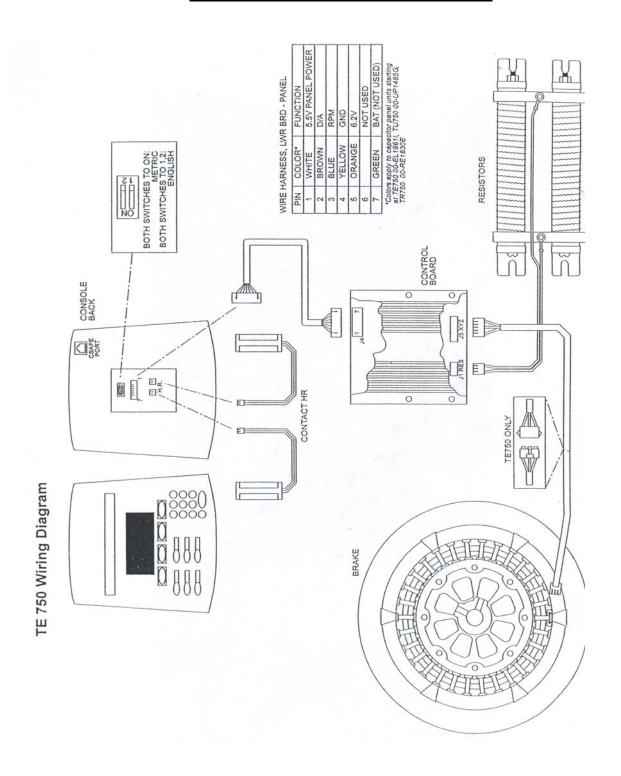
TRUE TAE 600 WIRING DIAGRAM



TRUE TAE 750 WIRING DIAGRAM



TRUE TE 750 WIRING DIAGRAM

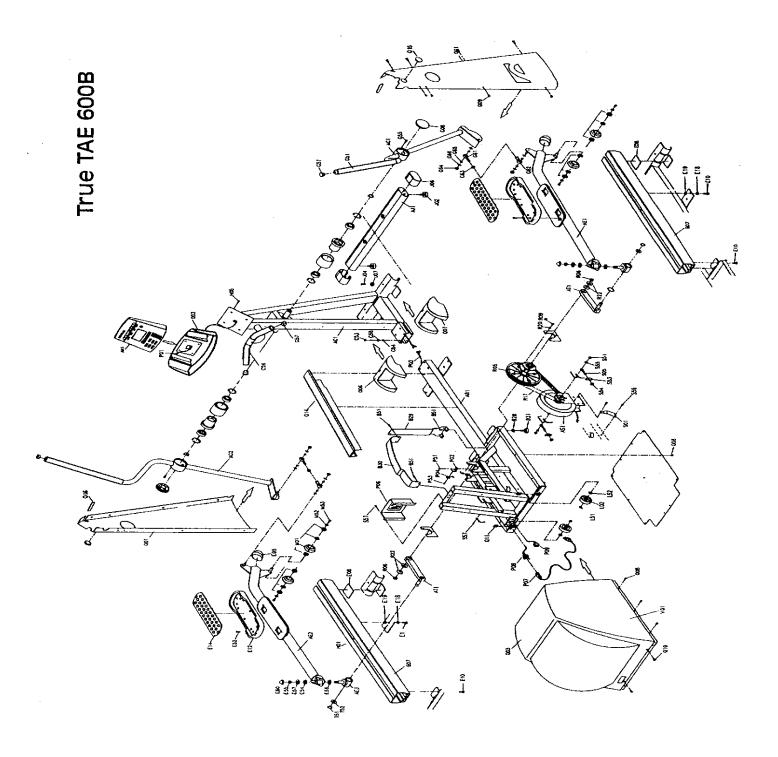


True Armed Elliptical 600B

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TRUE TAE 600 PARTS DIAGRAM



TAE 600B

DEE #	D 4 D T "	DECORIDEION	O-T\(
REF#	PART#	DESCRIPTION	QTY
AC1	7TSZEP42CSM	CONSOLE MAST ASSY	1
AE1	7TSZEP17PAM-6R1	RIGHT ARM ASSY LEFT ARM ASSY	1
AE2 AE3	7TSZEP17PAM-6L1	MVG ARM PIVOT	1 2
	7TSW0306011A 7TSZEP25HDB-R	HANDLEBAR ASSY RH	
AG1 AG2	7TSZEP25HDB-K 7TSZEP25HDB-L	HANDLEBAR ASSY LH	1 1
AG2 AJ1	7TSZEP25HDB-L 7TSZEP07FST	FRNT STBL ASSY	1
AN1	7TS12325001	CONSOLE ASSY	1
AS1	7TMD0208010C	BRAKE ECB SET	1
AT1	7TS08317001	CRANK ARM	2
B28	7TMB0301002	FOOT PAD WASHER	2
B29	7TMJ1390003E	VERTCL SPT PLATE	1
B30	7TMJ1390003E	UPPER SPT PLATE	1
B31	7TMB0302002	FOOT PAD	2
B51	7TME0102021	SCREW CVR SPT	6
C53	7 110120102021	SOREW OVER SITE	4
C54			4
C55			4
C56	7TMB0401050A	STATIONARY BAR	2
E05	7TMB0609025	STABILIZER BAR	2
E07	7TSZEP25RAL	ARM TRACK	1
E08	7TMB0674006	RUBBER PLATE TRK	2
E10	7TME0112024	OVAL HEX SKT TRK	8
E12	7TMB0206002C	FOOT PLATE	2
E14	7TMB0304011	FOOT PLATE INSERT	2
E18	7TME0502027	FLAT WASHER	8
E19	7TME0501007	SPRING WASHER	8
E52	7TME0102027	SCREW FOOTPLATE	8
E54	7TME0505037	TEFLON WASHER	2
E55	7TME0204026	NYLON NUT	2
E56	7TME0505020	TEFLON WASHER	2
E57	7TME0502006	FLAT WASHER	2
E60	7TMB0609063B	MVG ARM JOINT	2
G08	7TMB0678005A	END CAP SWING ARM	2
AC1	7TSP0302022A	CONSOLE MAST	1
G51	7TMB0401058A	FOAM GRIP UPPER H/BAR	2
G55	7TME0104057	SCREW RND HEX	8
G57	7TMB0609018	HNDLBR END CAP	4
G61	7TMD0508001	CONNECTOR ARM A	1
G62	7TMD0508002	CONNECTOR ARM B	1
G63	7TME0101042	CONNECTOR ARM NUT	1
G64	7TME0204007	NYLON NUT	4
G65	7TME0506013	WAVE WASHER	8
G66	7TME0508011	WASHER CONNECTOR ARM	8
J02	7TMB0304006	FT LEVELER	2
J04	7TME0112024	SCREW FT STABILIZER	2
J06	7TMB0609035	END CAP STABILIZER	2
J07	7TMJ3344001	RAIL CVR ANCHOR	22
L02	7TMB0103002	MOVING WHEEL	2

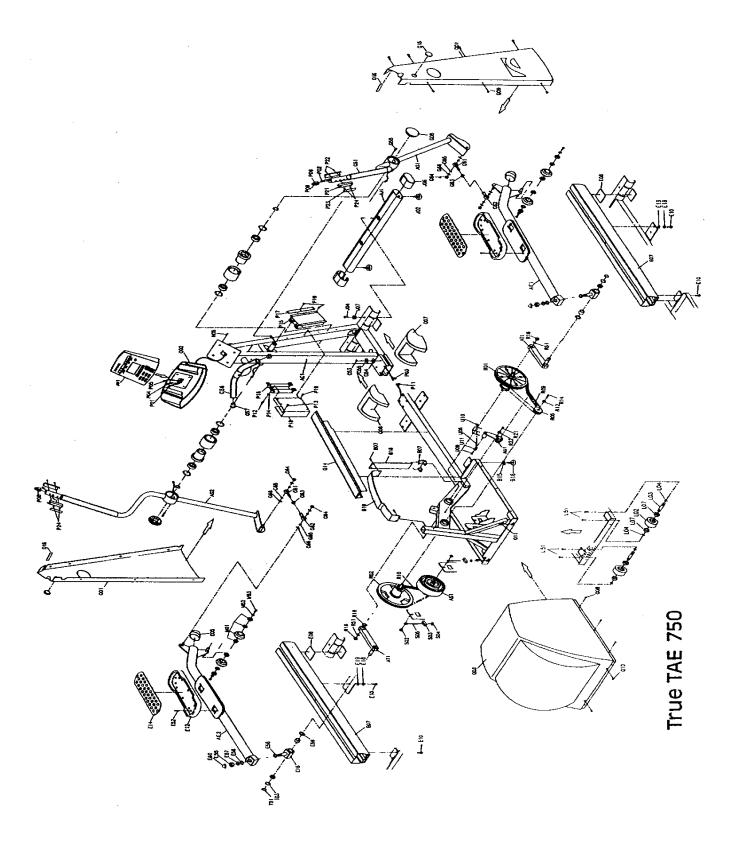
L51	7TME0204005	NYLON NUT	2
L52	7TME0502030	FLAT WASHER	2
M01	7TS11317001	WHEEL ASSY MVG ARM	1
M52	7TME0502026	FLAT WASHER	4
M53	7TME0112074	SCREW OVAL HEX SCKT	4
			·-
N05	7TME0104055	SCREW CNTRL PNL	4
P01	7TMC0501045D	CONSOLE WIRE UPPER	1
P02	7TMJ1802001	SENSOR BRKT	1
P03	7TMC0522004	CONSOLE WIRE LOWER	1
P04	7TMC0510039B	RPM SENSOR W/WIRE	1
P06	7TMC0203006B	CONTROL BOARD	1
P07	7TMC0504042	POWER CORD	1
P08	7TMC0703019A	POWER SOCKET	1
P09	7TMC0701002	POWER SWITCH	1
P51	7TME0102021	RPM SENSOR SCREW	1
P53	7TME0108004	SCREW OVAL TAPPING	2
Q01	7TMB0202036A	PEDESTAL SIDE CVR	2
Q02	7TMB0601005	WATER BTL HLDR	1
Q03	7TMB0222005A	MAIN CVR	1
Q06	7TMB0246001	RAIL CVR LH	1
AC1	7TSP0302022A	CONSOLE MAST	1
Q07	7TMB0246002	RAIL CVR RH	1
Q08	7TME0121005	MAIN CVR	19
Q09	7TME0107030	PEDESTAL CVR	14
Q10	7TME0107013	MAIN CVR	6
Q11	7TME0701001	C CLIP MAIN CVR	2
Q14	7TMB0627006B	CORROSION CVR	1
Q15	7TMB0613010A	RND PLUG RT SIDE CVR	2
Q16	7TMB0678018A	RECTANGULER PLUG	1
R05	7TMJ3305016A	POLY V WHEEL	1
R06	7TME0208006	NUT HEX HEAD	2
R09	7TME0104047	FLYWHEEL	6
R17	7TMD0603005	POLY V BELT	1
R20	7TME0504006	WASHER	6
R22	7TME0508004	WASHER	4
S01	7TMJ1374012A	ECB CONNECTION PLATE	1
S05	7TME0110002	EYE-BOLT	2
S51	7TME0110002	AXLE NUT	2
S53	7TMJ1245001	BELT ADJ	2
S54	7TME0204010	BELT ADJ	2
S55	7TME0502054	AXLE NUT	2
S56	7TME0102021	BRAKE BRKT	2
S57	7TME0107013	CONTROL BOARD	5
T51	7TME0902015	CRANK PIN	2
T52	7TME0506012	CRANK PIN	2
V01	7TMG0102057B	REAR CVR	2
	7TME0606037C	ASSEMBLY	1
		, COLINDEI	'

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TRUE TAE 750 PARTS DIAGRAM



TAE 750

REF.#	PART#	DESCRIPTION	QTY
AC1	7TSZEP17CSM	PEDESTAL ASSY-WITH PIVOT BEARING BLOCK ASSY	1
AE1	7TSZEP17PAM-7R1	PEDAL ARM ASSY-RH	1
AE2	7TSZEP17PAM-7L1	PEDAL ARM ASSY-LH	1
AG2	7TSZEP17HDB-R	HANDLEBAR ASSY-RH(TALL)	1
AG2	7TSZEP17HDB-R1	HANDLEBAR ASSY-RH(SHORT)	1
AG3	7TSZEP17HDB-L	HANDLEBAR ASSY-LH(TALL)	1
AG3	7TSZEP17HDB-L1	HANDLEBAR ASSY-LH(SHORT)	1
AJ1	7TSZEP07FST	STABILIZER ASSY-FRONT	1
AN1	7TS12317001	CONTROL PANEL	1
AS1	7TMZD0208007	BRAKE ASSY	1
AS1	7TMD0208016B	BRAKE ASSY-AFTER SERIAL # 02-EA-1102K	1
AT1	7TSZW0306007	CRANK ARM ASSY	2
AU1	7TSM0325001	BELT TENSIONER ASSY-PRIMARY	1
B07	7TME0102021	SCREW-FRAME SUPPORT	6
B15	7TMB0301002	LEVELER LOCK NUT-REAR	4
B16	7TMB0302002	LEVELER-REAR	4
B18	7TMJ1390001	COVER LOWER SUPPORT-REAR	1
B19	7TMJ1390004	COVER UPPER SUPPORT-REAR	1
C15	7TME0104165	BOLT-PEDESTAL MOUNTING	4
C16	7TME0502019	WASHER-PEDESTAL MOUNTING	4
C17	7TME0501007	SPRING WASHER-PEDESTAL MOUNTING	4
C56	7TMB0401050A	GRIP-FIXED HANDLEBAR	2
E04	7TMB0206002C	PEDAL PLATE (PLASTIC)	2
E05	7TMB0609025	END CAP-PEDAL ARM	2
E07	7TSZEP25RAL	PEDAL ARM TRACK	2
E08	7TMB0674006	RUBBER PAD-PEDAL ARM TRACK	2
E10	7TME0112024	SCREW-TRACK MOUNTING	8
E12	7TME0102027	SCREW-PEDAL PLATE	8
E15	7TMB0304011	PEDAL PLATE COVER (RUBBER)	2
E18	7TME0502027	FLAT WASHER-TRACK MOUNTING	8
E19	7TME0501007	SPRING WASHER-TRACK MOUNTING	8
G04	7TMB06A7001	BRACKET-PULSE SENSOR	2
G05	7TME0102069	SCREW-PULSE BRACKET	4
G06	7TMJ1278001	SENSOR PLATE-PULSE	2
G07	7TME0201028	NUT-PULSE BRACKET	4
G08	7TMB0678005A	END CAP-SWING ARM PIVOT	2
G51	7TMB0401059A	GRIP-UPPER BODY HANDLEBAR	2
G61	7TMD0508001	SWIVAL JOINT	2
G62	7TMD0508002	SWIVAL JOINT	2
G64	7TME0204007	NYLON NUT-SWIVAL JOINT	4
G66	7TME0508011	CONE WASHER-SWIVAL JOINT	8
J02	7TMB0304006	LEVELER-FRONT	2
J04	7TME0112024	SCREW-FRONT STABILIZER	2
J06	7TMB0609035	END CAP-FT STABILIZER	2
J07	7TMJ3344001	RETAINER-RAIL COVER	2
P01	7TMC0501027	CABLE-DISPLAY	1
P02	7TMC0516021B	CABLE-REMOTE SWITCH(H/BAR END)	2 Page 25
P03	7TMC0535004	CABLE-BRAKE (LOWER BOARD END)	- 1 age 23
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P04	7TMC0516022B	CABLE-REMOTE SWITCH(LH CONSOLE END)	1
P05	7TMC0516023C	CABLE-REMOTE SWITCH(RH CONSOLE END)	1
P06	7TMC0535005	CABLE-BRAKE (BRAKE END)	1
P06	7TMC0712019B	SWITCH-RH HANDLEBAR RÉMOTE	
P07	7TME0204003	NYLON NUT-REISTOR MOUNTING	4
P08	7TME0102027	SCREW-RESISTOR MOUNT	7
P08	7TMC0712020B	SWITCH-LH HANDLEBAR REMOTE	
P09	7TME0502082	WASHER-RESISTOR MOUNT	4
P11	7TMC0203004	CONTROL BOARD	1
P12	7TMC0736002	RESISTOR	1
P17	7TMB06B8001	MOUNT-CONTROL BOARD	1
P18	7TMJ1393003	BRACKET-RESISTOR	1
P20	7TME0107037	SCREW-RESISTOR MOUNT	11
Q01	7TMB0202036A	SIDE COVER SET-LEFT & RIGHT	1
Q02	7TMB0601005	BOTTLE HOLDER	1
Q03	7tszep07Fcv	COVER-REAR	1
Q06	7TMB0246001	COVER-LEFT RAIL	1
Q06	7TMB0246002	COVER-RIGHT RAIL	1
Q08	7TME0102053	SCREW-REAR COVER	10
Q09	7TME0107030	SCREW-SIDE COVERS	12
Q10	7TME0107013	SCREW-REAR COVER	2
Q11	7TME0701001	C CLAMP-REAR COVER	2
Q14	7TMB0627006B	COVER-CENTER FRAME MEMBER	1
Q15	7TMB0613010A	PLUG-ROUND-SIDE COVER	2
Q16	7TMB0678018A	PLUG-SQUARE-SIDE COVER	1
R01	7TSM0330001	SHAFT ASSY-PEDAL CRANK	1
R02	7TSM0330002	SHAFT ASSY-SECONDARY DRIVE W/SMALL POLY V WHEEL	1
R09	7TMD0604001	POLY V BELT-PRIMARY DRIVE	1
R10	7TMD0601014	POLY V BELT-SECONDARY DRIVE	1
R16	7TME0208008	NUT-CRANK ARM	2
R21	7TME0112024	SCREW-TENSIONER MOUNTING	1
R22	7TME0502035	WASHER-TENSIONER MOUNTING	1
R26	7TSZEP17CPS	PIVOT-PEDAL ARM	2
R27	7TS11317001	WHEEL-PEDAL ARM	4
R28	7TME0502026	WASHER-PEDAL ARM WHEEL	4
R29	7TME0112074	SCREW-PEDAL ARM WASHER	4
S02	7TME0202012	NUT-BRAKE AXLE NUT	2
S03	7TMJ1245001	BRACKET-BRAKE BELT ADJUSTER	2
S04	7TME0204010	NYLON NUT-BRAKE BELT ADJUSTER	2
S05	7TME0110015	BOLT-BRAKE BELT ADJUSTER	2
U08	7TME0110009	BOLT-PRIMARY BELT ADJUSTER	2
U09	7TME0102010	SCREW-PRIMARY BELT ADJUSTER	1
U10	7TME0204009	NYLON NUT-PRIMARY BELT ADJUSTER	1
U11	7TME0502098	WASHER-PRIMARY BELT ADJUSTER	1
	7TMG0102032	DECAL-REAR COVER(WHITE)	2
	7TMG0102096D	DECAL-REAR COVER(SILVER)	2
	7TME0606037C	HARWARE KIT-ASSEMBLY	1

True Elliptical 750

Prior to Serial # 00-EL2253L (Non-Cartridge Bearing)

❖ Exploded diagram	Page 28
* Exploded diagram	1 450 40

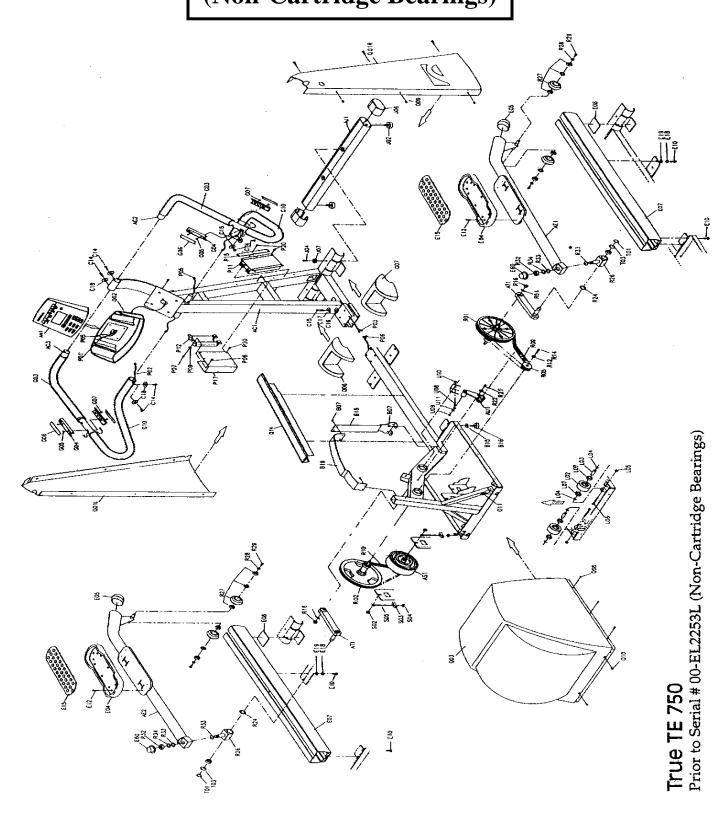
❖Parts lists Page 29

After Serial # 00-EL2253L (Cartridge Bearing)

ge 31

♦ Parts lists Page 32

TRUE TE 750 PARTS DIAGRAM (Non-Cartridge Bearings)



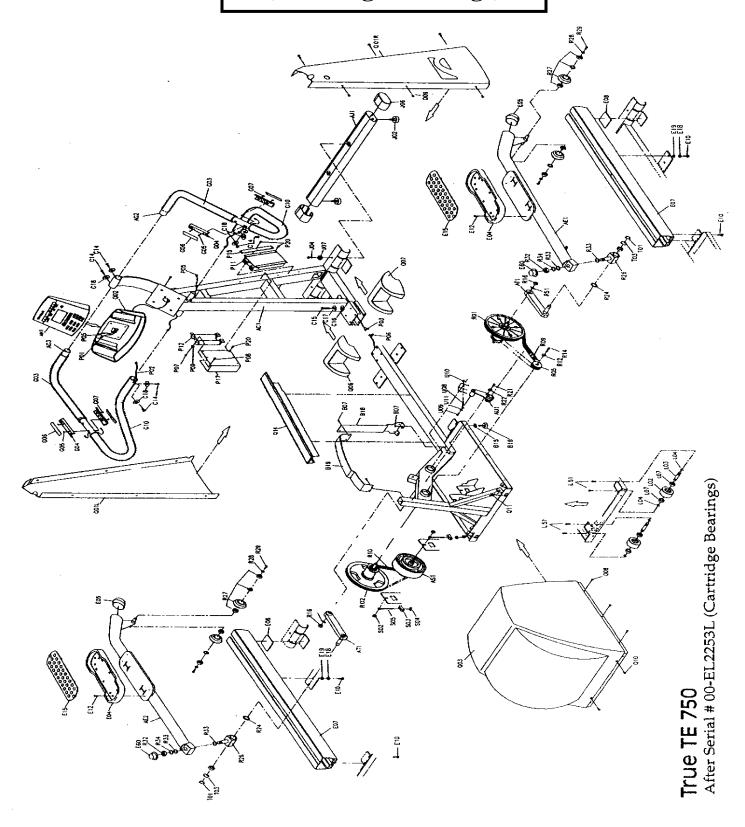
TE 750 PRIOR TO SERIAL # 00-EL2253L

(Non- Cartridge Bearings)

REF.#	PART#	DESCRIPTION	QTY
AC1	7TSP0302010	PEDESTAL	1
AE1	7TSZ03307001R	PEDAL ARM ASSY-RH	1
AE2	7TSZ03307001L	PEDAL ARM ASSY-LH	1
AG2	7TSZEP07HDB-R	HANDLEBAR ASSY-RH	1
AG3	7TSZEP07HDB-L	HANDLEBAR ASSY-LH	1
AJ1	7TSZEP07FST	STABILIZER ASSY-FRONT	1
AN1	7TSZM0307002	CONTROL PANEL	1
AS1	7TMZD0208007	BRAKE ASSY	1
AS1	7TMD0208016B	BRAKE ASSY-AFTER SERIAL # 02-EL0541J	1
AT1	7TSZW0306007	CRANK ARM ASSY	2
AU1	7TSM0325001	BELT TENSIONER ASSY-PRIMARY	1
B07	7TME0102021	SCREW-FRAME SUPPORT	6
B15	7TMB0301002	LEVELER LOCK NUT-REAR	4
B16	7TMB0302002	LEVELER-REAR	4
B18	7TMJ1390001	COVER LOWER SUPPORT-REAR	1
B19	7TMJ1390004	COVER UPPER SUPPORT-REAR	1
C14	7TME0112029	SCREW-HANDLEBAR MOUNTING	6
C15	7TME0104165	BOLT-PEDESTAL MOUNTING	4
C16	7TME0502019	WASHER-PEDESTAL MOUNTING	4
C17	7TME0501007	SPRING WASHER-PEDESTAL MOUNTING	4
E04	7TMB0206002C	PEDAL PLATE (PLASTIC)	2
E05	7TMB0609025	END CAP-PEDAL ARM	2
E07	7TSZEP25RAL	PEDAL ARM TRACK	2
E08	7TMB0674006	RUBBER PAD-PEDAL ARM TRACK	2
E10	7TME0112024	SCREW-TRACK MOUNTING	8
E12	7TME0102027	SCREW-PEDAL PLATE	8
E15	7TMB0304011	PEDAL PLATE COVER (RUBBER)	2
E18	7TME0502027	FLAT WASHER-TRACK MOUNTING	8
E19	7TME0501007	SPRING WASHER-TRACK MOUNTING	8
G04	7TMB06A7001	BRACKET-PULSE SENSOR	2
G05	7TME0102069	SCREW-PULSE BRACKET	4
G06	7TMJ1278001	SENSOR PLATE-PULSE	2
G07	7TME0201028	NUT-PULSE BRACKET	4
J02	7TMB0304006	LEVELER-FRONT	2
J04	7TME0112024	SCREW-FRONT STABILIZER	2
J06	7TMB0609035	END CAP-FT STABILIZER	2
J07	7TMJ3344001	RETAINER-RAIL COVER	2
P01	7TMC0501027	CABLE-DISPLAY	1
)2	7TMC0516005	CABLE-HRC PEDESTAL END	2
P03	7TMC0535004	CABLE-BRAKE (LOWER BOARD END)	1
P05	7TMC0539003	CABLE-HRC HANDLEBAR END	2
P06	7TMC0535005	CABLE-BRAKE (BRAKE END)	1
P07	7TME0204003	NYLON NUT-REISTOR MOUNTING	4
P08	7TME0102027	SCREW-RESISTOR MOUNT	7 Page 29

P09	7TME0502082	WASHER-RESISTOR MOUNT	4
P11	7TMC0203004	CONTROL BOARD	1
P12	7TMC0736002	RESISTOR	1
P17	7TMB06B8001	MOUNT-CONTROL BOARD	1
P18	7TMJ1393003	BRACKET-RESISTOR	1
P20	7TME0107037	SCREW-RESISTOR MOUNT	11
Q01L	7TMB020202A	SIDE COVER-LEFT FRONT	1
Q01R	7TMB020202R	SIDE COVER-RIGHT FRONT	1
Q02	7TMB0601005	BOTTLE HOLDER	1
Q03	7TMB0222003	COVER-REAR	1
Q06	7TMB0246001	COVER-LEFT RAIL	1
Q06	7TMB0246002	COVER-RIGHT RAIL	1
Q08	7TME0102053	SCREW-REAR COVER	10
Q09	7TME0107030	SCREW-SIDE COVERS	12
Q10	7TME0107013	SCREW-REAR COVER	2
Q11	7TME0701001	C CLAMP-REAR COVER	2
Q14	7TMB0627006B	COVER-CENTER FRAME MEMBER	1
R01	7TSZEP07DAX	SHAFT ASSY-PEDAL CRANK	1
R02	7TSZEP07PUL	SHAFT ASSY-SECONDARY DRIVE	1
R05	7TMZD0112013	POLY V WHEEL-SMALL	1
R09	7TMD0604001	POLY V BELT-PRIMARY DRIVE	1
R10	7TMD0601014	POLY V BELT-SECONDARY DRIVE	1
R16	7TME0208008	NUT-CRANK ARM	2
R21	7TME0112024	SCREW-TENSIONER MOUNTING	1
R22	7TME0502035	WASHER-TENSIONER MOUNTING	1
R26	7TSZEP17CPS	PIVOT-PEDAL ARM	2
R27	7TS11317001	WHEEL-PEDAL ARM	4
R28	7TME0502026	WASHER-PEDAL ARM WHEEL	4
R29	7TME0112074	SCREW-PEDAL ARM WASHER	4
S02	7TME0202012	NUT-BRAKE AXLE NUT	2
S03	7TMJ1245001	BRACKET-BRAKE BELT ADJUSTER	2
S04	7TME0204010	NYLON NUT-BRAKE BELT ADJUSTER	2
S05	7TME0110015	BOLT-BRAKE BELT ADJUSTER	2
U08	7TME0110009	BOLT-PRIMARY BELT ADJUSTER	2
U09	7TME0102010	SCREW-PRIMARY BELT ADJUSTER	1
U10	7TME0204009	NYLON NUT-PRIMARY BELT ADJUSTER	1
U11	7TME0502098	WASHER-PRIMARY BELT ADJUSTER	1
	7TMG0102032	DECAL-REAR COVER(WHITE)	2
	7TME0606020	HARWARE KIT-ASSEMBLY	1

TRUE TE 750 PARTS DIAGRAM (Cartridge Bearings)



TE 750 AFTER SERIAL # 00-EL2253L

CARTRIDGE BEARING TYPE

REF.#	PART#	DESCRIPTION	QTY
AC1	7TSP0302010	PEDESTAL	1
AE1	7TSZ03307001R	PEDAL ARM ASSY-RH	1
AE2	7TSZ03307001L	PEDAL ARM ASSY-LH	1
AG2	7TSZEP07HDB-R	HANDLEBAR ASSY-RH	1
AG3	7TSZEP07HDB-L	HANDLEBAR ASSY-LH	1
AJ1	7TSZEP07FST	STABILIZER ASSY-FRONT	1
AN1	7TSZM0307002	CONTROL PANEL	1
AS1	7TMZD0208007	BRAKE ASSY	1
AS1	7TMD0208016B	BRAKE ASSY-AFTER SERIAL # 02-EA-1102K	1
AT1	7TSZW0306007	CRANK ARM ASSY	2
AU1	7TSM0325001	BELT TENSIONER ASSY-PRIMARY	1
B07	7TME0102021	SCREW-FRAME SUPPORT	6
B15	7TMB0301002	LEVELER LOCK NUT-REAR	4
B16	7TMB0302002	LEVELER-REAR	4
B18	7TMJ1390001	COVER LOWER SUPPORT-REAR	1
B19	7TMJ1390004	COVER UPPER SUPPORT-REAR	1
C14	7TME0112029	SCREW-HANDLEBAR MOUNTING	6
C15	7TME0104165	BOLT-PEDESTAL MOUNTING	4
C16	7TME0502019	WASHER-PEDESTAL MOUNTING	4
C17	7TME0501007	SPRING WASHER-PEDESTAL MOUNTING	4
E04	7TMB0206002C	PEDAL PLATE (PLASTIC)	2
E05	7TMB0609025	END CAP-PEDAL ARM	2
E07	7TSZEP25RAL	PEDAL ARM TRACK	2
E08	7TMB0674006	RUBBER PAD-PEDAL ARM TRACK	2
E10	7TME0112024	SCREW-TRACK MOUNTING	8
E12	7TME0102027	SCREW-PEDAL PLATE	8
E15	7TMB0304011	PEDAL PLATE COVER (RUBBER)	2
E18	7TME0502027	FLAT WASHER-TRACK MOUNTING	8
E19	7TME0502027	SPRING WASHER-TRACK MOUNTING	8
G04	7TMB06A7001	BRACKET-PULSE SENSOR	2
G05	7TME0102069	SCREW-PULSE BRACKET	4
G06	7TMJ1278001	SENSOR PLATE-PULSE	2
G07	7TME0201028	NUT-PULSE BRACKET	4
J02	7TMB0304006	LEVELER-FRONT	2
J04	7TME0112024	SCREW-FRONT STABILIZER	2
J04 J06	7TMB0609035	END CAP-FT STABILIZER	2
J08 J07	7TMJ3344001	RETAINER-RAIL COVER	2
P01	7TMC0501027	CABLE-DISPLAY CABLE-HRC PEDESTAL END	1
P02	7TMC0516005		2
P03	7TMC0535004	CABLE-BRAKE (LOWER BOARD END)	1
P05	7TMC0539003	CABLE-HRC HANDLEBAR END	2
P06	7TMC0535005	CABLE-BRAKE (BRAKE END)	1
P07	7TME0204003	NYLON NUT-REISTOR MOUNTING	4
P08	7TME0102027	SCREW-RESISTOR MOUNT	7
P09	7TME0502082	WASHER-RESISTOR MOUNT	4
P11	7TMC0203004	CONTROL BOARD	1
P12	7TMC0736002	RESISTOR	1

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P17	7TMB06B8001	MOUNT-CONTROL BOARD	1
P18	7TMJ1393003	BRACKET-RESISTOR	1
P20	7TME0107037	SCREW-RESISTOR MOUNT	11
Q01L	7TMB020202A	SIDE COVER-LEFT FRONT	1
Q01R	7TMB020202R	SIDE COVER-RIGHT FRONT	1
Q02	7TMB0601005	BOTTLE HOLDER	1
Q03	7TMB0222003	COVER-REAR	1
Q06	7TMB0246001	COVER-LEFT RAIL	1
Q06	7TMB0246002	COVER-RIGHT RAIL	1
Q08	7TME0102053	SCREW-REAR COVER	10
Q09	7TME0107030	SCREW-SIDE COVERS	12
Q10	7TME0107013	SCREW-REAR COVER	2
Q11	7TME0701001	C CLAMP-REAR COVER	2
Q14	7TMB0627006B	COVER-CENTER FRAME MEMBER	1
R01	7TSM0330001	SHAFT ASSY-PEDAL CRANK	1
R02	7TSM0330002	SHAFT ASSY-SECONDARY DRIVE	1
R05	7TMZD0112013	POLY V WHEEL-SMALL	1
R09	7TMD0604001	POLY V BELT-PRIMARY DRIVE	1
R10	7TMD0601014	POLY V BELT-SECONDARY DRIVE	1
R16	7TME0208008	NUT-CRANK ARM	2
R21	7TME0112024	SCREW-TENSIONER MOUNTING	1
R22	7TME0502035	WASHER-TENSIONER MOUNTING	1
R26	7TSZEP17CPS	PIVOT-PEDAL ARM	2
R27	7TS11317001	WHEEL-PEDAL ARM	4
R28	7TME0502026	WASHER-PEDAL ARM WHEEL	4
R29	7TME0112074	SCREW-PEDAL ARM WASHER	4
S02	7TME0202012	NUT-BRAKE AXLE NUT	2
S03	7TMJ1245001	BRACKET-BRAKE BELT ADJUSTER	2
S04	7TME0204010	NYLON NUT-BRAKE BELT ADJUSTER	2
S05	7TME0110015	BOLT-BRAKE BELT ADJUSTER	2
U08	7TME0110009	BOLT-PRIMARY BELT ADJUSTER	2
U09	7TME0102010	SCREW-PRIMARY BELT ADJUSTER	1
U10	7TME0204009	NYLON NUT-PRIMARY BELT ADJUSTER	1
U11	7TME0502098	WASHER-PRIMARY BELT ADJUSTER	1
	7TMG0102032	DECAL-REAR COVER(WHITE)	2
	7TME0606020	HARWARE KIT-ASSEMBLY	1

True Fitness

Removal & Replacement

- **❖** 500R
- **❖** 500U
- **❖ 600U**
- **❖** 600R

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Removal and Replacement

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750E & 750EA Series Elliptical

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Remove Hub Assembly	Page 47

Remove Crank

Tools Required:

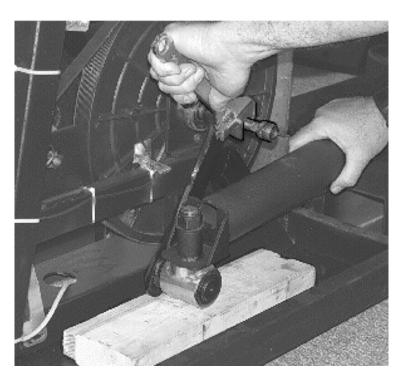
Crank Puller Crescent Wrench Block of wood

Step 1.

Place block of wood under moving Arm assembly to prebvent counterclockwise rotation. Note position of block of wood to the left of the tray.

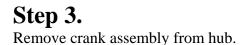


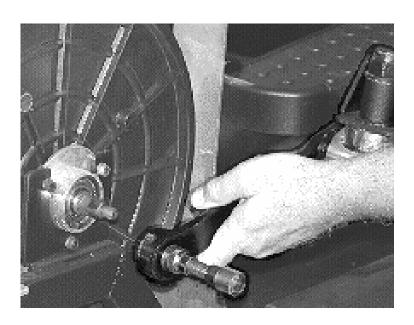
Place 15mm socket end of crank Puller over axle nut. Loosen the axle Nut by turning the crank puller counter-Clockwise with a crescent wrench.



Step 1. Wood Block Placement.

Step 2. Axel Nut Removal.





Step 3. Remove Crank Assembly from Hub.

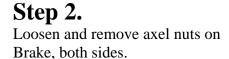
Remove Belt Wheel

Tools Required:

15mm Socket nd Ratchet 11mm Box End Wrench 5mm Hex Wrench Phillips Screw Driver

Step 1.

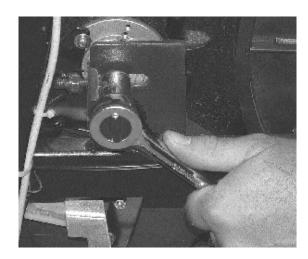
Loosen belt-tensioning nuts on bolts Attached to brake axel on both sides.



Step 3. Push belt over edge and off of wheel.



Step 1. Loosen Belt Tensioning Nuts.



Step 2. Remove Axel Nuts.



Step 3. Remove Belt from Wheel.

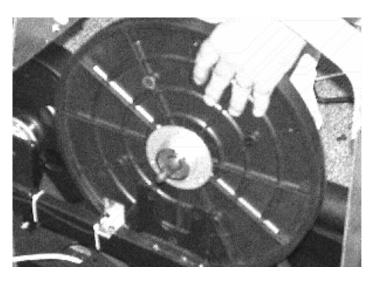
Remove Belt Wheel (Continued)

Step 4.

Remove 5mm hex screws from Bearing fixtures on both sides of belt Wheel axel

Step 4. Remove screws from Bearing Fixtures.

Step 5.Lift belt wheel assembly from bearing Fixtures.



Step 5. Lift belt wheel assembly from bearing Fixtures.

Remove Brake

Tools Required:

Phillips Screw Driver

Step 1.

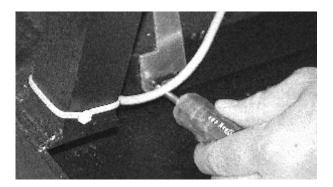
Remove screw holding the nagnet Brake bracket located under the rear Brake with Phillips head screw driver.

Step 2.

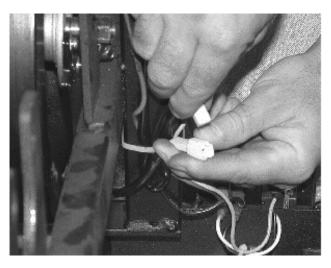
Disconnect electrical terminal at Brake.

Step 3.

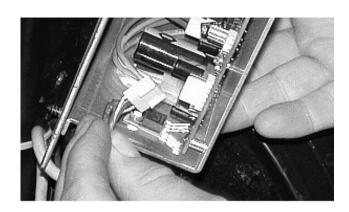
Disconnect electrical terminal from The console set at the control box Located above the brake.



Step 1. Brake Bracket Removal.



Step 2. Disconnect Electrical Terminal at Brake.

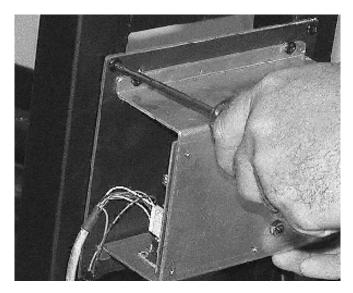


Step 3. Disconnect Cable from Control Box.

Remove Brake (Continued)

Step 4.

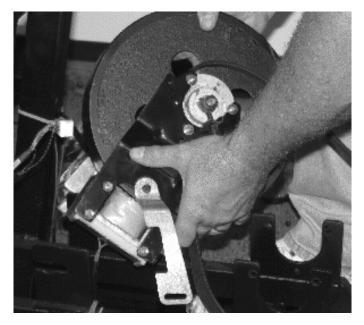
Remove Phillips head scrwes Holding control box above the brake To the frame. Remove control box..



Step 4. Control Box Removal.

Step 5.

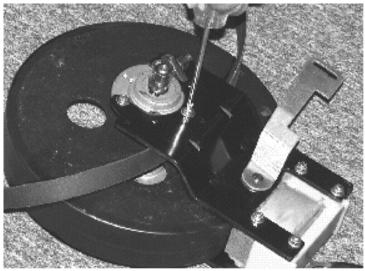
Pull backwards on the brake and Magnet assembly to free it from Slotted axle flanges. Lift brake Out.



Step 5. Lift Brake & Magnet Assembly Out.

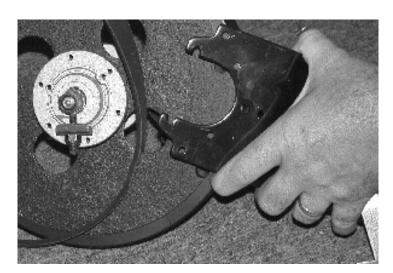
Remove Brake (Continued)

Step 6.Remove Phillips head screws
From brackets on both sides of Brake.



Step 6. Remove Screws from Bracket.

Step 7. Remove brackets to free belt.



Step 7. Remove Brake Brackets & Belt.

Remove Belt & Tensioner Assembly

Tools Required:11mm Box Wrench 5mm Hex Wrench

Step 1.

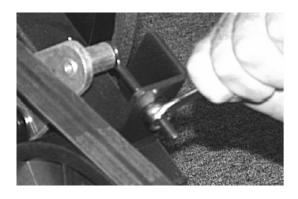
Use 11mm box wrench to remove Nut and washer from belt tensioning screw.

Step 2.

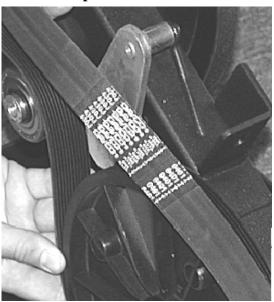
Remove belt from belt tensioner Assembly and wheels.

Step 3.

Use 5mm hex wrench to remove Button head screw and washer Attaching belt tensioner assembly to Frame..



Step 1. Remove Nut.



Step 2. Remove Belt.



Step 3. Remove Tensioner.

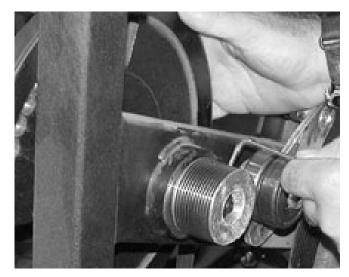
Remove Small Poly-V Pulley

Tools Required:

3mm Hex Wrench 4mm Hex Wrench Bicycle Crank Puller Hammer Handle Adjustable Wrench

Step 1.

Use 3mm hex wrench to loosen set Screw in pulley.



Step 1. Loosen Set Screw.

Step 2.Use Hammer Handle to prevent Rotation of large wheel when

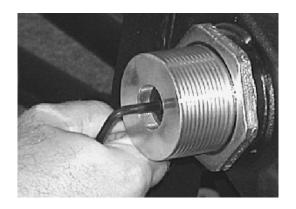
Removing pulley.



Step 2. Prevent Rotation of Fly Wheel.

Remove Small Poly-V Pulley (Continued)

Step 3.Use 4mm hex wrench to remove Screw and washer holding the Small Poly- V wheel on.



Step 3. Remove Center Screw.

Step 4.Remove Poly-V wheel using bicycle Crank puller and adjustable wrench

Remove key from shaft.



Step 4. Use Puller to Remove.

Remove Crank & .235 Diameter Poly-V Pulley

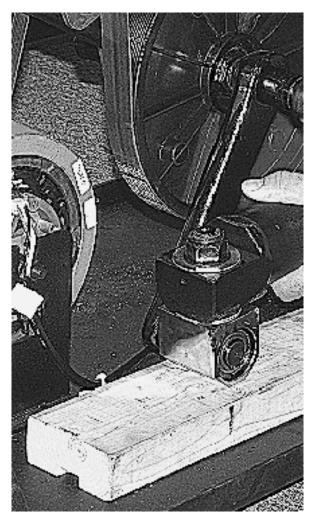
Tools Required:

Block of Wood to Block Crank 21mm Socket & Ratchet Metric Cotter-less Crank Puller 10mm Hex Wrench

Step 1.

Place block of wood under crank at Left to prevent counter-clockwise Rotation.

Step 2.Remove center nut using 21mm socket & ratchet.

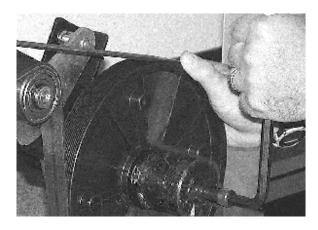


Step 1. Block to Prevent Rotation.

Step 2. Prevent Rotation of Fly Wheel.

Remove Crank & .235 Diameter Poly-V Pulley (Continued)

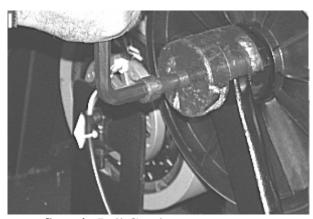
Step 3.Move block of wood to right of Crank to prevent clockwise rotation.



Step 3. Block to Prevent Rotation.

Step 4.

Place metric cotter-less crank puller Over end of crank shaft. Turn puller clock-wise with 10mm Hex wrench to remove crank.



Step 4. Pull Crank.

Step 5.Pull crank arm off of crank shaft And set moving arm aside.



Step 5. Move Arm Aside.

Remove Hub Assemblies

Tools Required:

Elliptical Wrench (pn: 90361501) Channel Lock Pliers

Flat Blade Screwdriver

Step 1.

Use elliptical wrench or pliers to Remove large hex nuts holding hub Assembly in place.



Step 1. Remove Large Hex Nut.

Step 2.

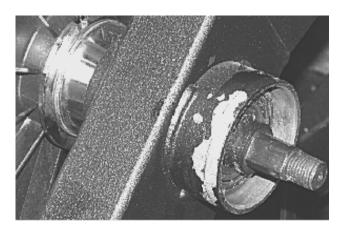
Remove retainer clip with flat-blade Screwdriver

To remove wheel from frame, slip Shaft through bearing.



Step 2. Remove Clip.

Step 3.Pull wheel and hub assembly out as A unit. Bearings and axle cannot be Field serviced.



Step 3. Pull Assembly Out.