



**2ST**

# HIP EXTENSION

## OWNER'S MANUAL

REVISED: July 14, 1998

SERIAL NO.'S

through

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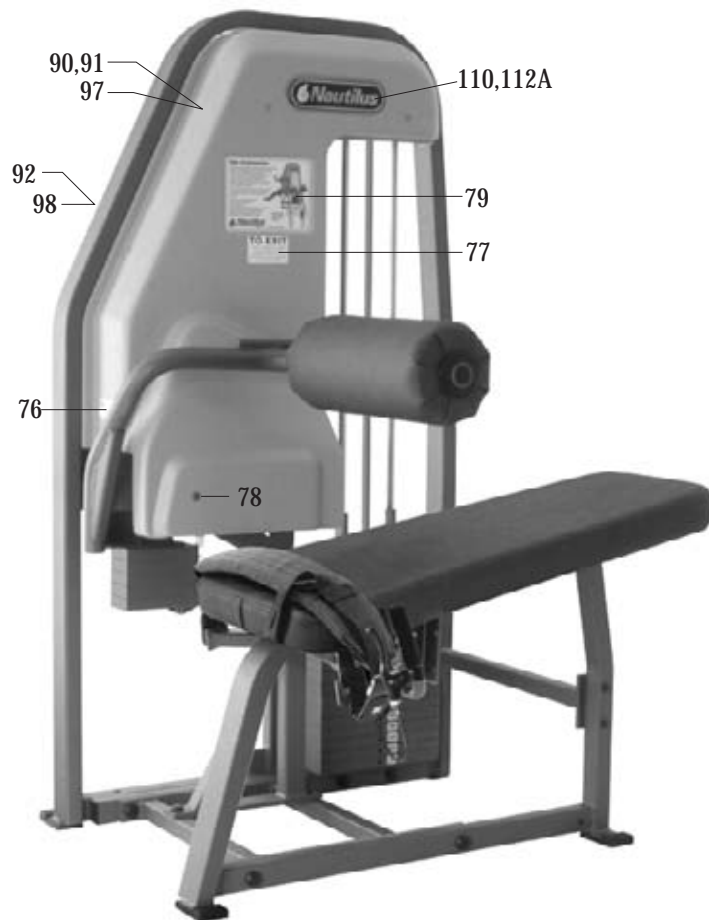
### Maintenance Manual

Follows page 8

See last pages of this manual for 2ST  
Strength Circuit Exercise Order Diagram  
and 2ST Floor Plan Kit.



PARTS AND SERVICE  
709 Powerhouse Road  
Independence, Virginia 24348  
800-235-2233  
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19-4912

# **Nautilus**® 2ST Hip Extension

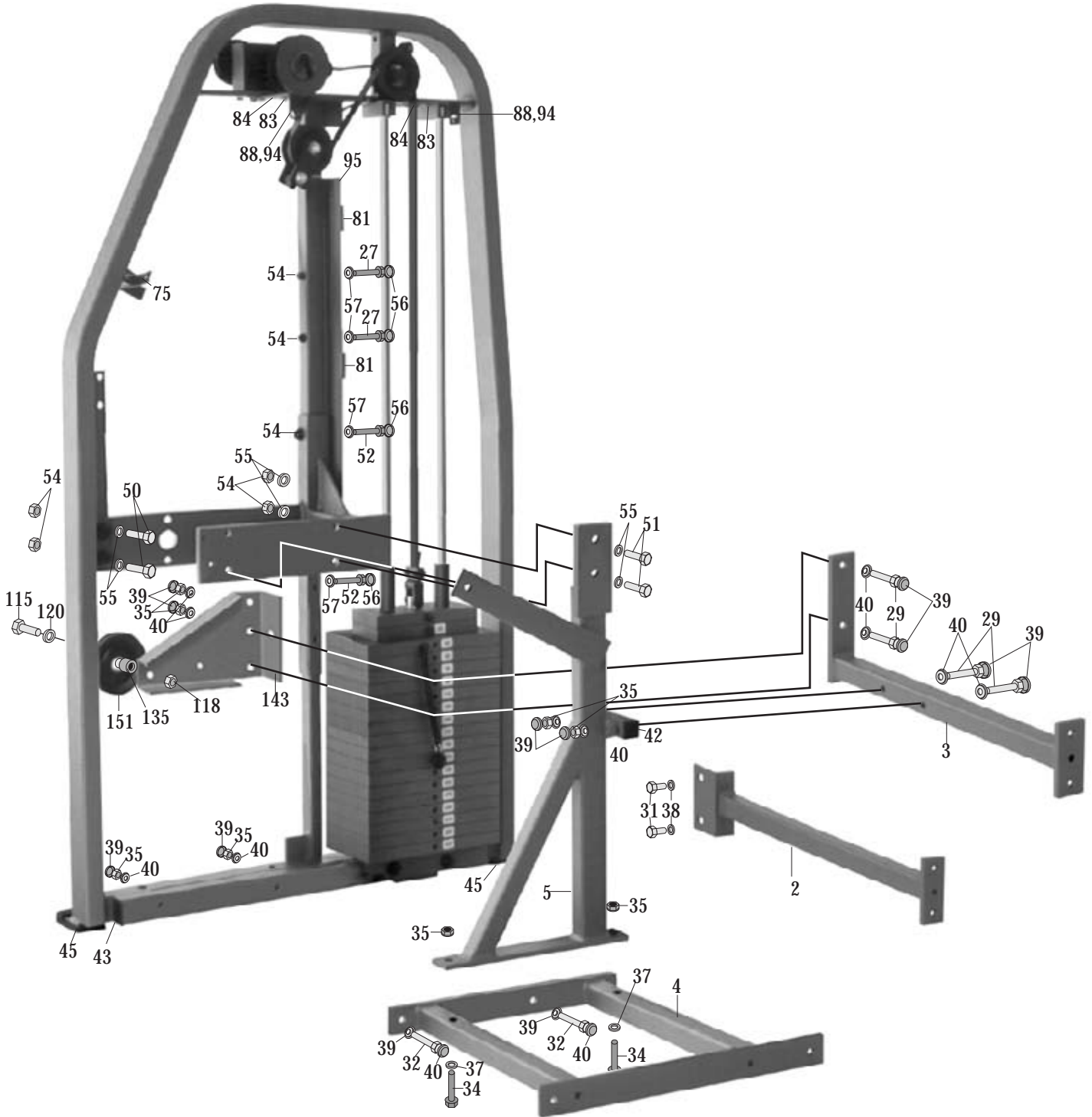
## BENCH FRAME ASSEMBLY



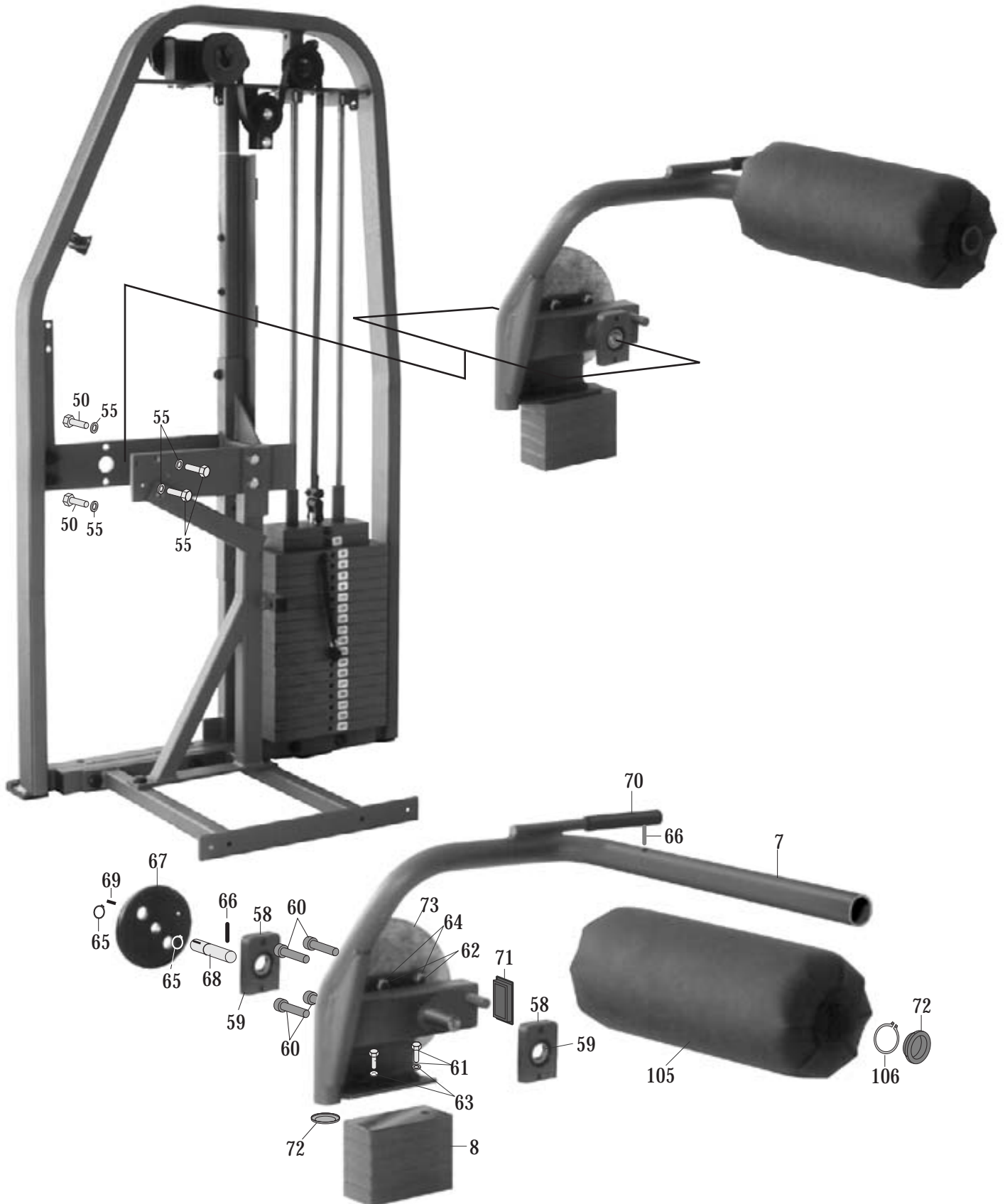


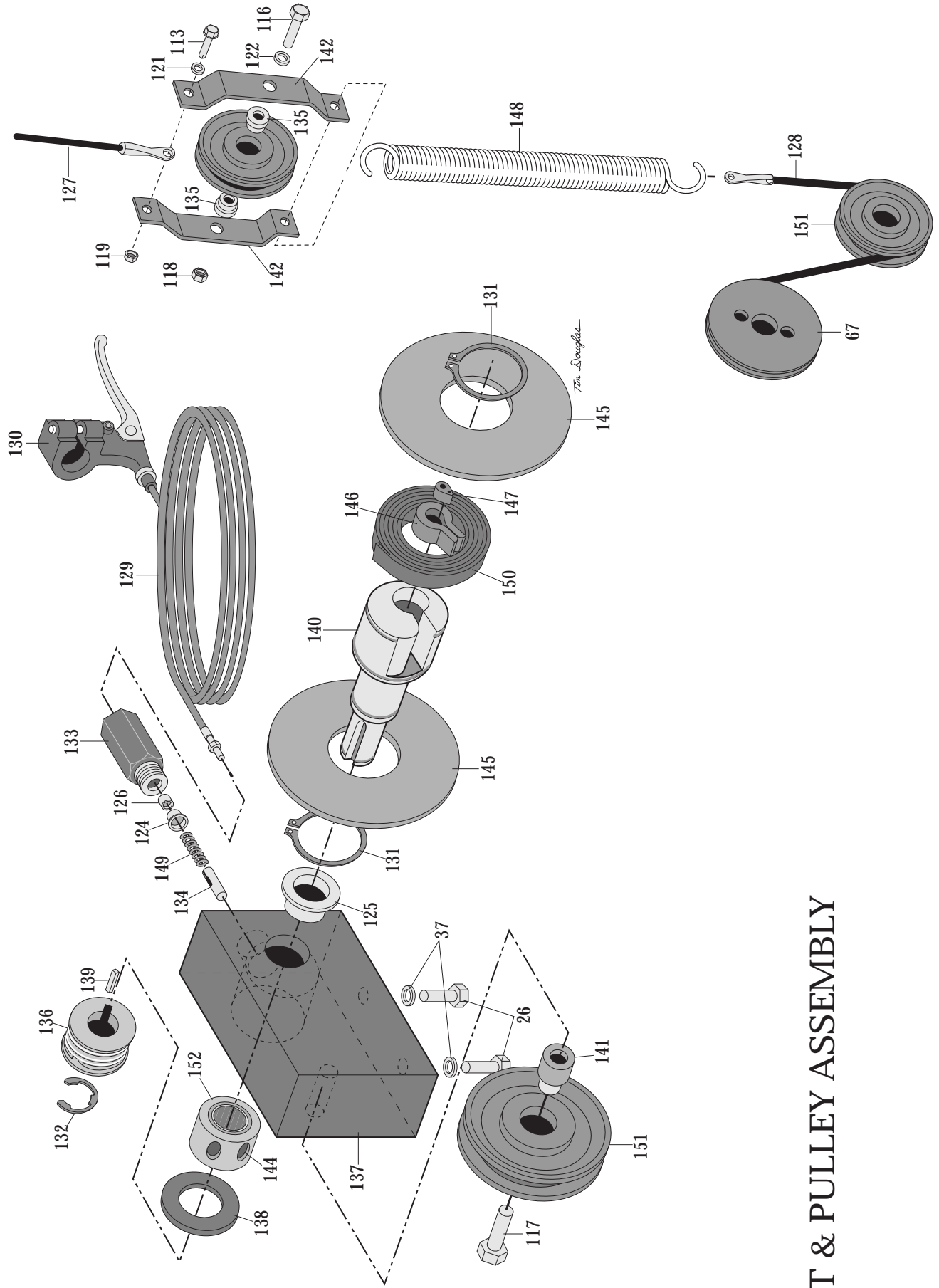
# **Nautilus**® 2ST Hip Extension

## CROSSMEMBER & WORKBOX ASSEMBLY



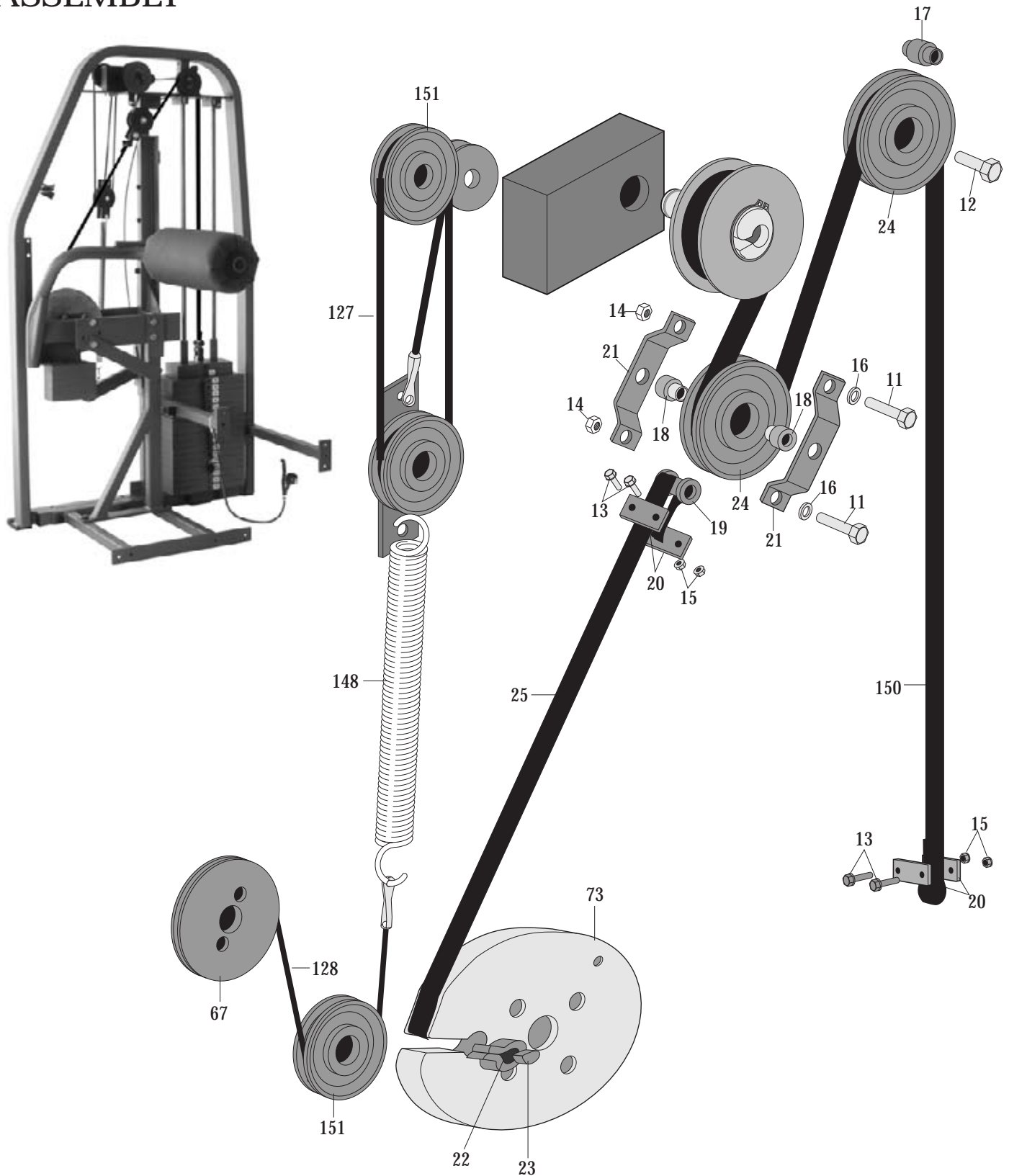
MOVEMENT ARM  
ASSEMBLY





**BELT & PULLEY ASSEMBLY**

**BELT & CABLE ASSEMBLY**



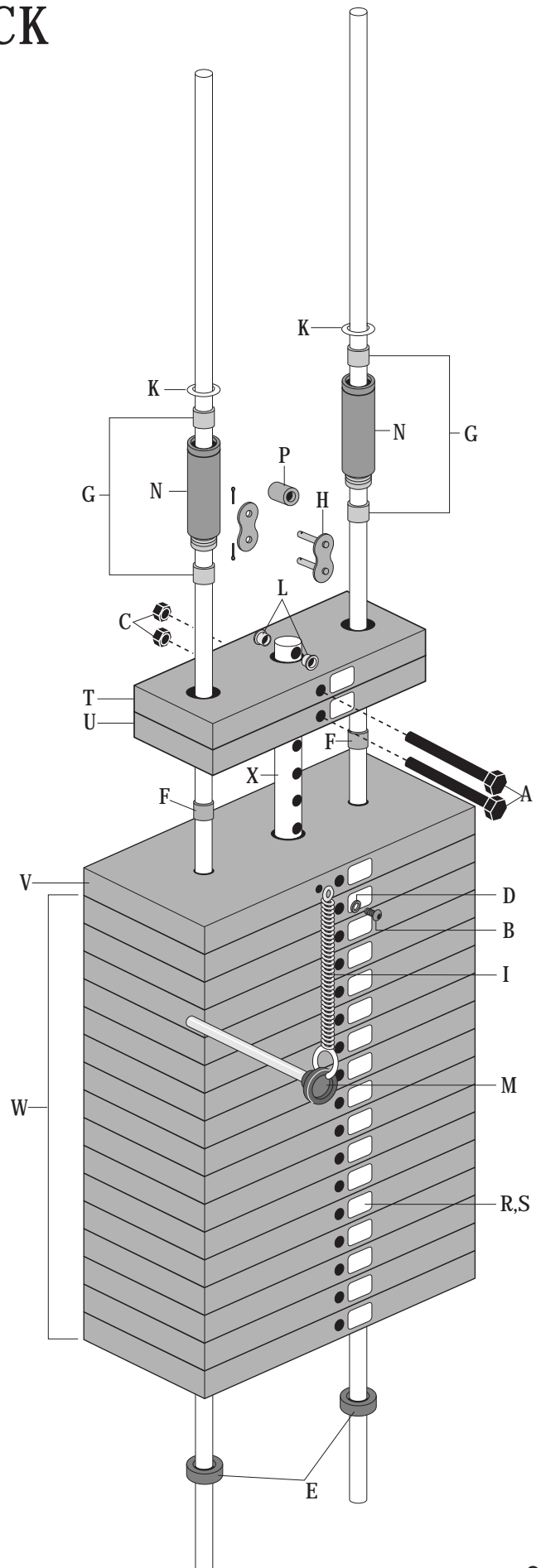
# HIP EXTENSION WEIGHT STACK

## WOMENS/ MEDICAL WEIGHTSTACK

REF #	PART #	DESCRIPTION
A	01-0010	BOLT HH2 7/16-14 X 4 1/2 BLACK
B	02-4134	1/4 X 1/2 PAN HD TYPE "F" SCREW BLACK
C	03-1045	NUT NTE 7/16 BLACK
D	04-1011	WASHER FLAT 1/4 BLACK
E	04-5070	RUBBER WEIGHT STACK WASHER
F	05-4020	BOTTOM WEIGHT BUSHING
G	05-4055	TOP WEIGHT BUSHING
H	06-2005	CHAIN LINK #100 CONNECTING LINK
I	06-7064	COIL SUPER 6"
J	06-8150	1 1/4 EXTERNAL SNAP RING
K	06-8254	SNAP RING 1"
L	07-4000	NYLINER PLASTIC BUSHING
M	07-8297	PIN WEIGHT SELECTOR W/MAGNET 7" LENGTH
N	07-9268	TOP WEIGHT SLEEVE
O	09-3066	HOLE PLUG 1 1/4 DIA WHITE
P	09-6135	BELT ROLLER
Q	12-1028	DECAL WARNING 6"
R	12-1058	WEIGHT STACK DECAL 30-285 lbs
S	12-1067	WEIGHT STACK DECAL 13.6 - 129.5 kg
T	17-2204	1 X 4 X 9.330 TOP WEIGHT STEEL, 10 lbs.
U	17-2203	1 X 4 X 9.330 BOTTOM WEIGHT STEEL, 10 lbs.
V	17-2170	1 X 6 X 9.330 SECOND WEIGHT STEEL, 15 lbs.
W	17-2097	1 X 6 X 9.330 BOTTOM WEIGHT STEEL, 15 lbs.
X	17-4078	WEIGHT STACK PIN 19 HOLE, 20 1/4(powder paint)

## STANDARD WEIGHTSTACK

REF #	PART #	DESCRIPTION
A	01-0010	BOLT HH2 7/16-14 X 4 1/2 BLACK
B	02-4134	1/4 X 1/2 PAN HD TYPE "F" SCREW BLACK
C	03-1045	NUT NTE 7/16 BLACK
D	04-1011	WASHER FLAT 1/4 BLACK
E	04-5070	RUBBER WEIGHT STACK WASHER
F	05-4020	BOTTOM WEIGHT BUSHING
G	05-4055	TOP WEIGHT BUSHING
H	06-2005	CHAIN LINK #100 CONNECTING LINK
I	06-7064	COIL SUPER 6"
J	06-8150	1 1/4 EXTERNAL SNAP RING
K	06-8254	SNAP RING 1"
L	07-4000	NYLINER PLASTIC BUSHING
M	07-8297	PIN WEIGHT SELECTOR W/MAGNET 7" LENGTH
N	07-9268	TOP WEIGHT SLEEVE
O	09-3066	HOLE PLUG 1 1/4 DIA WHITE
P	09-6135	BELT ROLLER
Q	12-1028	DECAL WARNING 6"
R	12-1053	WEIGHT STACK DECAL 30-410 lbs
S	12-1068	WEIGHT STACK DECAL 13.6 - 186.5 kg
T	17-2204	1 X 4 X 9.330 TOP WEIGHT STEEL, 10 lbs.
U	17-2203	1 X 4 X 9.330 BOTTOM WEIGHT STEEL, 10 lbs.
V	17-2175	1 X 6 X 12.16 SECOND WEIGHT STEEL, 20 lbs.
W	17-2095	1 X 6 X 12.16 BOTTOM WEIGHT STEEL, 20 lbs.
X	17-4078	WEIGHT STACK PIN 19 HOLE, 20 1/4(powder paint)



**USE CAUTION  
WHEN WORKING  
WITH WEIGHT  
STACK !**



# 2ST HIP EXTENSION

Revised 11/13/98

## EQUIPMENT LINE CODE

- 2HES FULLY SHIELDED HIP EXTENSION
- 2WHES WOMEN'S FULLY SHIELDED HIP EXTENSION
- 2MHES MEDICAL FULLY SHIELDED HIP EXTENSION
- 2HE PARTIALLY SHIELDED HIP EXTENSION
- 2WHE WOMEN'S PARTIALLY SHIELDED HIP EXTENSION

## REF # PART # DESCRIPTION

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- WL26 WELDMENT KIT HIP EXTENSION
- 1.....BF502.....BACK FRAME ASSEMBLY
  - 2.....CM515.....CROSSMEMBER ASSEMBLY
  - 3.....CM517.....CROSSMEMBER ASSEMBLY
  - 4.....CM544.....CROSSMEMBER ASSEMBLY
  - 5.....CM545.....CROSSMEMBER ASSEMBLY
  - 6.....HB503.....HANDLEBAR ASSEMBLY
  - 7.....MA520.....BHE MOVEMENT ARM
  - 8.....MA520A.....BHE MOVEMENT ARM CWEIGHT
  - 9.....SF504.....SEAT FRAME ASSEMBLY
  - 10.....WB515.....WORKBOX ASSEMBLY

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- BLT 25 BELT & PULLEY KIT HIP EXTENSION
- 11.....01-1321.....1/2 X 2 1/2 BOLT HH5
  - 12.....01-2180.....5/8 X 1 1/2 BOLT HH5
  - 13.....01-4030.....1/4 X 1 WHIZ FLANGE BOLT
  - 14.....03-1055.....NUT 1/2 NTE
  - 15.....03-4290.....1/4-20 WHIZ FLANGE LOCKNUT
  - 16.....04-5214.....1/2 LOC WASH
  - 17.....06-5045.....ANTI-JUMP ROLLER
  - 18.....07-8363.....IDLER PULLEY SPACER
  - 19.....07-8366.....BELT ANCHOR TUBE
  - 20.....07-8982.....WT. ST. BELT ANCHOR
  - 21.....07-9079.....IDLER SIDE PLATES
  - 22.....08-7063.....TEARDROP (CAM)
  - 23.....08-7064.....TEARDROP INSERT
  - 24.....09-8327.....3" PULLEY
  - 25.....24-6030.....KEVLAR BELT (TO CAM) 36"

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- FR22 FRAME KIT HIP EXTENSION
- 26.....01-1546.....3/8 X 3/4 BOLT HH5
  - 27.....01-1121.....3/8 X 2 BOLT HH5 BLACK
  - 28.....01-1151.....3/8 X 2 3/4 BOLT HH5 BLACK
  - 29.....01-1551.....BOLT HH5 3/8 X 3 1/4 BLACK
  - 30.....02-9071.....3/8 X 3 3/4 BOLT HH5
  - 31.....01-1258.....BOLT HH5 1/2 X 3/4 BLACK
  - 32.....02-9074.....BOLT HH5 3/8 X 4 1/4 BLACK
  - 33.....02-9210.....3/8 X 1 BOLT HH5 BLACK
  - 34.....02-9250.....BOLT HH5 3/8 X 2 1/4 BLACK
  - 35.....03-1035.....NUT 3/8 NTE
  - 36.....03-1035.....NUT 3/8 BLACK
  - 37.....04-5213.....3/8 INT LOC WASHER BLACK
  - 38.....04-5214.....1/2 INT LOC WASHER BLACK
  - 39.....04-5145.....WHITE PLASTIC BOLT CAP
  - 40.....04-5135.....3/8 BOLT CAP WASHER
  - 41.....09-1058.....7/8 X 4 1/2 SOFT GRIP
  - 42.....09-2010.....1 1/4 SQ CAP
  - 43.....09-2040.....1 1/2 X 2 HP
  - 44.....09-2060.....1 1/2 X 3 CAP
  - 45.....09-5035.....RECTANGLE FOOTPAD
  - 46.....09-3063.....HOLE PLUG 7/16 DIA WHITE
  - 47.....09-8080.....CABLE TIE 12" LONG
  - 48.....17-1481.....GUIDE RODS 59 1/8 LONG (BF502)

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- WX06 WORKBOX KIT HIP EXTENSION
- 49.....01-1151.....3/8 X 2 3/4 BOLT HH5 BLACK
  - 50.....01-1271.....1/2 X 1 1/4 BOLT HH5

## REF # PART # DESCRIPTION

- 51.....01-1282.....1/2 X1 1/2 BOLT HH5
- 52.....01-1402.....1/2 X 2 1/4 BOLT HH5
- 53.....03-1035.....NUT 3/8 BLACK
- 54.....03-1055.....NUT 1/2 NTE
- 55.....04-5214.....1/2 LOC WASH
- 56.....04-5145.....WHITE PLASTIC BOLT CAP
- 57.....04-5135.....3/8 BOLT CAP WASHER
- 58.....07-8402.....TAPPED BEARING MOUNT (205PP)
- 59.....45-1063.....205PP BEARINGS

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- MV14 HIP EXTENSION MOVEMENT ARM KIT
- 60.....02-4119.....1/2 X 1 3/4 AC
  - 61.....02-9210.....BOLT HH5 3/8 X 1 BLACK
  - 62.....03-1055.....NUT 1/2 NTE
  - 63.....04-5213.....WASHER INT LOC 3/8 BLACK
  - 64.....04-5214.....1/2 LOC WASH
  - 65.....06-8200.....5/8 DIA RETAINING RING
  - 66.....07-7010.....PIN ROLL .25 X 1 - BLACK
  - 67.....07-8371.....CABLE DRIVE PULLEY
  - 68.....07-8374.....MA PULLEY SHAFT
  - 69.....07-8379.....SHAFT KEY - 1/8"
  - 70.....09-1010.....3/4 X 5 FOAM GRIP
  - 71.....09-2090.....2 X 3 HOLE PLUG
  - 72.....09-3092.....1 3/4 OD X 1 1/4 ID HOLE PLUG
  - 73.....11-1265.....CAM HIP EXTENSION

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- SH53 COMMON SHIELD PARTS HIP EXTENSION
- 74.....03-4060.....1/4-20 CLIP NUT
  - 75.....07-9137.....BF501 FRONT WORKBOX BRACKET
  - 76.....12-1026.....KEEP HANDS AWAY
  - 77.....12-1031.....HIP EXTENSION TO EXIT SIGN
  - 78.....12-1120.....CLIP RED PINE TREE
  - 79.....12-2762.....INSTRUCTION PLACARD HIP EXTENSION
  - 80.....19-1015.....2" SQ SERIES 170 DUAL LOC
  - 81.....19-1016.....1" X 2" RECTANGLE SERIES 400 DUAL LOC
  - 82.....19-4912.....PARTS DIAGRAM HIP EXTENSION
  - 83.....02-4070.....GRAY SHIELD SCREW 1/4 X 3/4
  - 84.....02-4074.....GRAY TRUSS SCREW 1/4 X 1/2

- E.L. CODE: 2HES, 2WHES, 2MHES*
- SH54 FULL SHIELD KIT 2HES
- 85.....02-4134.....1/4 X 1/2 PAN HD. TYPE "F" CUTTING SCREW
  - 86.....07-5078.....LG LOWER BASE SHIELD BRKT
  - 87.....07-5088.....FRNT FRAME WB BRACKET
  - 88.....07-9021.....UPPR MAIN FRAME SHIELD MNT
  - 89.....07-9135.....LGE LOW BASE SHIELD BRACKET
  - 90.....14-2014.....INSIDE FRAME SMALL SHIELD
  - 91.....14-2017.....INSIDE MAIN SHIELD HIP EXTENSION
  - 92.....14-2138.....STND LARGE FRAME OUTER SHIELD
  - 93.....02-4074.....GRAY SCREW TRUSS 1/4 X 1/2

- E.L. CODE: 2HE, 2WHE*
- SH55 SHIELD KIT 2HE
- 94.....07-8835.....UPPER MAIN FRAME SHIELD MOUNT
  - 95.....07-9275.....16GA SHEET METAL 2ST SHIELD SHROUD
  - 96.....09-3067.....1/4" WHITE HOLE PLUG (#1 SHIELD SCREW)
  - 97.....14-2061.....INSIDE SHIELD HIP EXTENSION
  - 98.....14-2067.....OUTER SHIELD HIP EXTENSION
  - 99.....19-1015.....2" SQ SERIES 170 DUAL LOC
  - 100.....19-1016.....1" X 2" RECTANGLE SERIES 400 DUAL LOC

- E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE*
- UPH20 BELTED HIP EXTENSION UPHOLSTERY KIT
- 101.....UP8045.....BACK PAD
  - 102.....UP711.....SLIPCOVER
  - 103.....02-9220.....BOLT HH5 3/8 X 1 1/4 BLACK
  - 104.....04-5213.....WASHER INT LOK 3/8 BLACK
  - 105.....UP9824.....ROLLER PAD

REF #	PART #	DESCRIPTION
106	06-8285	1 3/4 INV. EXT. SNAP RING 5108-177 BLACK
107	UP9182	PADDED SEAT BELT
108	01-1548	BOLT WIZ 3/8-16 X 3/4, BLACK
		<i>E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE</i>
	IN01	INSPECTION KIT
109	12-1080	INSPECTION STICKER DECAL
110	12-1088	DECAL NAUTILUS NAMEPLATE
111	19-1291	DECAL SERIAL # BAR CODE
112	40-7167	BAG 50 X 46 X 86 X .002 THICK
		<i>E.L. CODE: 2WHES, 2WHE</i>
	IN03	INSPECTION KIT
112A	12-1175	NAUTILUS WOMEN'S NAMEPLATE
		<i>E.L. CODE: 2HES, 2WHES, 2MHES, 2HE, 2WHE</i>
	ABTIR02	RANGE LIMITER KIT HIP EXTENSION
113	01-1536	1/4 X 1 BOLT HH5
114		
115	01-1105	3/8 X 1 1/2 BOLT HH5
116	01-1549	3/8 X 1 3/4 BOLT HH5
117	01-1282	1/2 X 1 1/2 BOLT HH5
118	03-1035	3/8 NUT NTE
119	03-4277	1/4 NUT FL 1/4-20
120	04-5206	3/8 SAE FLAT WASHER
121	04-5225	1/4 LOCK WASHER
122	04-5213	3/8 LOCK WASHER
123		
124	05-5105	IGUS BUSHING 1/2 ID X 3/4 LONG W/ FLANGE
125	05-5115	30MM ID X 5/8 IGUS
126	05-5125	IGUS BUSHING 1/2 ID X 3/4 LONG - NO FLANGE
127	06-7042	ABTIR DRIVE CABLE, 60"
128	06-7045	ABTIR PULLEY CABLE, 26 1/2"
129	06-7077	ABTIR CONTROL CABLE
130	06-8000	06-8000 7/8" HANDLE
131	06-8237	2.0" EXTERNAL RETAIN RING
132	06-8290	1" EXT. BOWEN E-RING
133	07-5093	ABTIR PIN-HUB
134	07-5098	ABTIR PIN
135	07-5560	IDLER INSERT
136	07-8845	MOLDED PLASTIC CABLE HUB
137	07-5565	ABTIR HUB BLOCK
138	07-5567	ABTIR SPACER
139	07-8861	5/16 X 7/8 KEY
140	07-8339	ABTIR SHAFT
141	07-8363	LINKAGE BEARING BUSHING
142	07-8840	IDLER BRACKET PLATE
143	07-8855	CABLE PULLEY BRACKET
144	07-9155	ABTIR CLUTCH HUB
145	07-9159	ABTIR BELT WASHER
146	08-7063	TEARDROP HOUSING
147	08-7064	TEARDROP SHAPED PLUG
148	10-1080	EXTENSION SPRING
149	10-2020	SPRING-COMPRESSION
150	24-6030	KEVLAR BELT 114"
151	45-1037	3" CABLE PULLEY
152	45-1070	30MM CLUTCH ASSY-MOBIL 28 GREASE-TORR