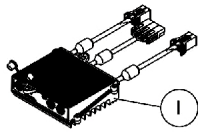
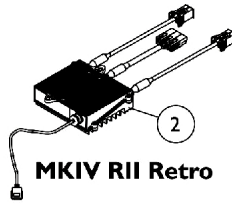


# MKIV Controllers, Programmer and Hardware

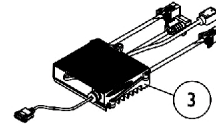
## MKIV Quad Pulse, RII Retro and RII 80 Amp



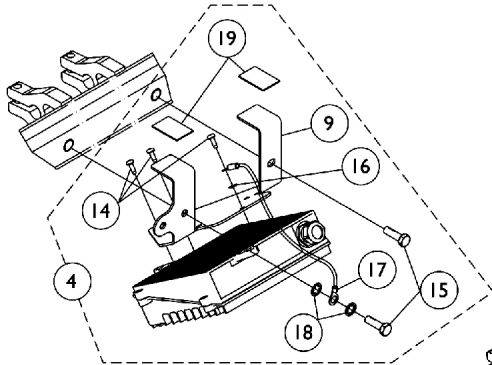
**MKIV Quad Pulse**



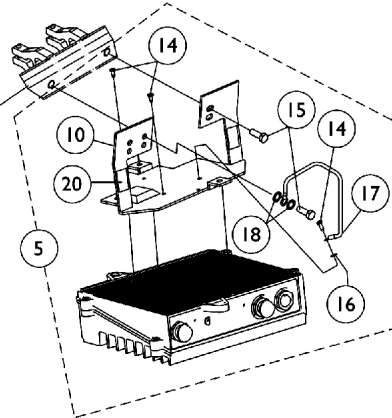
**MKIV RII Retro**



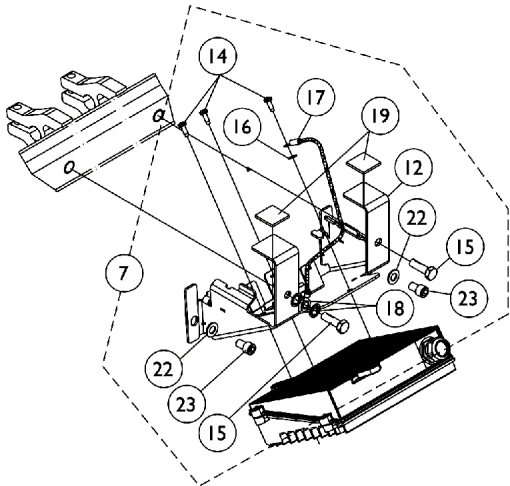
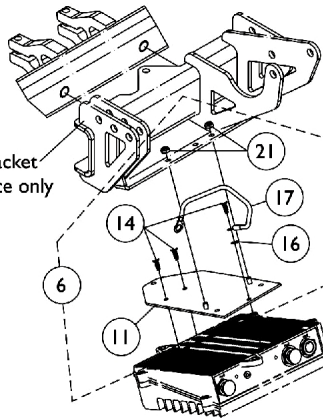
**MKIV RII 80 AMP.**



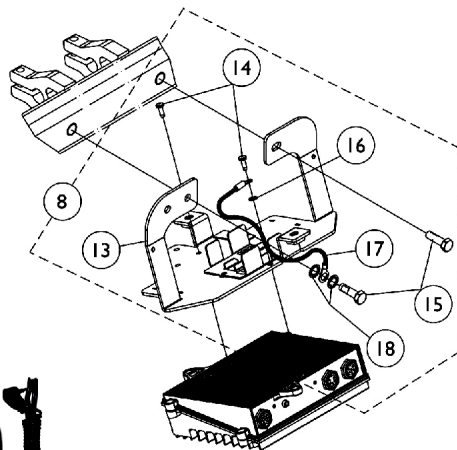
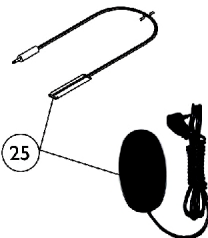
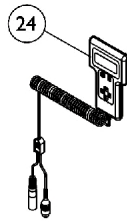
Partial view of Base Frame shown for reference only



Frame Support Bracket shown for reference only



**Item #7 Part Number I139436**



**Item #8 Part Number I140486**

## MKIV Controllers, Programmer and Hardware

### MKIV Quad Pulse, RII Retro and RII 80 Amp

Item Number	Note	Part Number	Description	Quantity Per	
				Package	Assembly
1	A	1105707-NLA	NLA - Controller, MKIV Quad Pulse	1	1
2	A,C,F	1095269-NLA	NLA - Controller, MKIV RII, Retro	1	1
3	B,D,G	1106819-NLA	NLA - Controller, MKIV RII (80 AMP)	1	1
4-8		See Chart	Controller Mounting Bracket with Hardware	1	1
9	E	1092661-NLA	NLA - Bracket w/ Fastener Strips, Controller Mounting	1	1
10	F	1092659-NLA	NLA - Kit, Controller Mounting Bracket with Fastener Strips, Black	1	1
11	G	1087790-NLA	NLA - Bracket, Controller Mounting, Black	1	1
12	H	1140265	Bracket with Fastener Strips, Controller Mounting	1	1
13	I	1140484-NLA	NLA - Bracket, Controller Mounting, Black	1	1
14		1040223-NLA	NLA - Screw (#8-32 x 1/2")	1	3
15		1104258	Screw, Hex Head w/ Patch (5/16-18 x 1")	1	2
16	O	1027263-NLA	NLA - Washer, Lock Internal Tooth (#10)	1	1
17		1104260-NLA	NLA - Wire, Grounding Jumper Strap E.S.D.	1	1
18		1023263-NLA	NLA - Washer, Internal Tooth (M8)	1	2
19		1070504-NLA	NLA - Fastener, Hook with Adhesive Back (1" W x 1" L)	1	2
20		1092662-NLA	NLA - Package, Fastener, Dual Lock 250 (1/2" W x 7/8" L)	10	1
21		1025735	Locknut (#10-32)	1	2
22		1025704	Washer, Flat (5/16 x 5/8 x 1/16")	1	2
23		1091541-NLA	NLA - Screw, Socket Head Cap (5/16-18 x 1/2")	1	2
24		1109091-NLA	NLA - Programmer, Remote	1	1
25	J	1020818	Switch, Red Flex Ribbon (Tape) Reset	1	1
25	K	1123276	Kit, Switch, Black Egg Reset w/ Hook/Loop Adhesive Back Fastener & Attaching Screws (EGSBLK)	1	1
	L,N	1107296-NLA	NLA - Harness, Battery (22NF)	1	1
	L,N	1109509-NLA	NLA - Harness, Battery (GP24)	1	1
	L,N	1108692-NLA	NLA - Decal, RII 80 Amp	1	1
	M,N	1105912-NLA	NLA - Kit, Electro Static Discharge Ground Strap - MKIV	1	1
	N,P	1105913-NLA	NLA - Instruction Sheet, E.S.D. Strap Kit MKIV	1	1
	N	1095204-NLA	NLA - Cable, Virtual Service, Charger/Modem	1	1
	N	1064404-NLA	NLA - Virtual Service Modem Kit	1	1
	N	1091631-NLA	NLA - Virtual Service Software Kit	1	1
	N	1103051-NLA	NLA - MKIV One 2 One Software Kit	1	1
	N	1046117-NLA	NLA - Printer and Interface	1	1
	N	1091980-NLA	NLA - Disk, 3.5 H.D. Floppy with V.S. Software	1	1
	N	1091637-NLA	NLA - Adaptor, Null Modem	1	1
	N	1091636-NLA	NLA - Service Manual - V.S. Software Kit	1	1
	N	1026572-NLA	NLA - Paper, Printer	1	1
	N	1027280-NLA	NLA - Harness, Printer Wiring	1	1

# MKIV Controllers, Programmer and Hardware

## MKIV Quad Pulse, RII Retro and RII 80 Amp

NOTE: A - It is recommended that an E.S.D. ground strap kit part number 1105912 be ordered when a new controller is needed for chairs built before 4/12/01. MKIV Quad Pulse Controller is also used for 3GTQ-TS models also

B - Battery harness (part number 1107296 for 22NF batteries) or (part number 1109509 for GP 24 batteries) must be present when the RII 80 AMP controller is used. RII 80 Amp. joystick decal part number 1108692 is also used.

C - Used for Torque SP before 11/01/01

D - Used on Torque SP after 10/31/01

E - Comes packaged in item 4 Controller Mounting Bracket with Hardware. See chart for Bracket application

F - Comes packaged in item 5 Controller Mounting Bracket with Hardware. See chart for Bracket application

G - Comes packaged in item 6 Controller Mounting Bracket with Hardware. See chart for Bracket application

H - Comes packaged in item 7 Controller Mounting Bracket with Hardware. See chart for Bracket application

I - Comes packaged in item 8 Controller Mounting Bracket with Hardware. See chart for Bracket application

J - Before 5/24/04

K - After 5/23/04. The Egg Reset Switch replaced the Red Flex Ribbon (Tape) Reset Switch

L - Required when a MKIV RII 80 Amp. Controller is used

M - Includes items 14-17 and Instruction Sheet

N - Not Shown

O - Part #1023263 is no longer available as a service part individually. Must order a complete Controller Mounting Bracket w/ Hardware Kit as a replacement.

P - Item is no longer available from the Invacare Service Parts Department. Refer to the Invacare Website under "Product Literature Search". Enter the part number in the "Keywords" field and download a free PDF version copy.

### Item #'s 4-8 Controller Mounting Bracket with Hardware

Seating System	Item #4 Controller Mounting Bracket with Hardware	Item #5 Controller Mounting Bracket with Hardware	Item #6 Controller Mounting Bracket with Hardware	Item #7 and #8 Controller Mounting Bracket with Hardware For TRRO/TRBKTS Option
Van Seat with one controller	1070401-NLA <small>See Note(s) A</small>	N/A	N/A	N/A
ASBA/ADJASBA w/ one controller	1070401-NLA <small>See Note(s) A</small>	N/A	N/A	1139436-NLA <small>See Note(s) F, D</small>
ASBA/ADJASBA with two controllers	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	1140486-NLA <small>See Note(s) F, E</small>
ASBA/ADJASBA with two controllers, shock forks and short base together as of 5/20/02	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	1140486-NLA <small>See Note(s) G, E</small>
ESS6-STM (Elevating Seat) with one controller	1070401-NLA <small>See Note(s) A</small>	N/A	N/A	N/A
ESS6-STM (Elevating Seat) with two controllers	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	N/A
ESS-PTO with two controllers	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	N/A
ESS-PTO with two controllers, shock forks and short base together as of 5/20/02	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	N/A
Power Tilt Only (PTO) with one controller	N/A	N/A	1107312-NLA <small>See Note(s) C</small>	N/A
2GT with one controller	N/A	1092650-NLA <small>See Note(s) B</small>	N/A	1139436-NLA <small>See Note(s) D, G</small>

# MKIV Controllers, Programmer and Hardware

## MKIV Quad Pulse, RII Retro and RII 80 Amp

### Item #'s 4-8 Controller Mounting Bracket with Hardware

Seating System	Item #4 Controller Mounting Bracket with Hardware	Item #5 Controller Mounting Bracket with Hardware	Item #6 Controller Mounting Bracket with Hardware	Item #7 and #8 Controller Mounting Bracket with Hardware For TRRO/TRBKTS Option
2GT with one controller, shock forks and short base together as of 5/20/02	1070401-NLA  See Note(s) A	N/A	N/A	1139436-NLA  See Note(s) D, G
2GT/2GR/2GTR with two controllers	N/A	1092650-NLA See Note(s) B	N/A	1140486-NLA See Note(s) G, E
2GT/2GR/2GTR with two controllers, shock forks and short base together as of 5/20/02	N/A	1092650-NLA  See Note(s) B	N/A	1140486-NLA  See Note(s) G, E
NOTE: A - Includes items 9 and 14-19 B - Includes items 10, 14-18 and 20 C - Includes items 11, 14, 16, 17 and 21 D - Includes items 12, 14-19, 22 and 23 E - Includes items 13 and 14-18 F - Used when TRRO or TRBKTS option is ordered G - Used only when TRBKTS option is ordered. TRRO option is not offered NOTE: Two Controllers = Joystick Controller and Powered Seating System Actuator Controller are being used				