

**Wayne
Dalton**
GARAGE DOORS & OPENERS

Service Manual

For Wayne-Dalton Ceiling Mounted Openers

prodrive™

classicdrive®
Quantum®

PRODRIVE®
CLASSICDRIVE®
QUANTUM®

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Service Kit

For Wayne Dalton Ceiling Mounted Openers

For your advantage in servicing operators, we now offer a service kit, which includes many of the most commonly used parts for servicing Wayne Dalton *prodrive*®, *classicdrive*®, and Quantum™ operators.

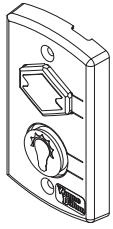
Parts included in the service kit are:

Chain Sprocket-4 cog	Driven Gear-4 cog
Chain Sprocket-2 cog	Driven Gear-2 cog
Belt Sprocket-2 cog	Trolley-Steel
Trolley Hardware Kit-Clevis Pin	Trolley-Universal
Trolley Hardware Kit-3/8 Bolt	Battery Pack
(2) Transmitter-3 Button 372 Mhz	Wall Station-Multi-function
Transmitter-2 Button 303 Mhz	Fastener Kit-Prodrive
Keyless Entry-5 Button (KEP3)	Service Manual
Motor Control Board-372 Mhz	

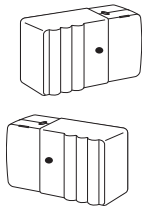


Part	Description	Price
326910	Service Parts Kit	119.00

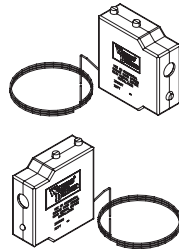
Accessories



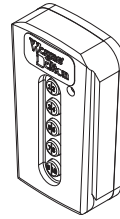
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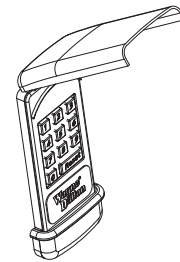
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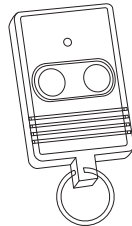
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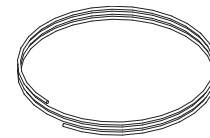
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Key	Part	Description	Price
1	309961	Wallstation-Wired	8.00
2	252133	Wireless Infrared Safety Sensors	74.00
3	252118	Wired Infrared Safety Sensors	41.00
4	327308	Keyless Entry, 5 button	34.00
5	327607	Keyless Entry, 10 button	40.00
6	327310	Transmitter 372 MHZ	18.00
7	311085	Transmitter 303 MHZ	20.00
8	327314	Wallstation, Multi Function	36.00
9	260701	Bell Wire, 80'	7.00
10	307545	Quantum Manual	3.00
11	326568	ClassicDrive Manual	3.00
12	325809	ProDrive Manual	3.00
13	326865	Service Manual	3.00
14	270802	MN-21 12V Battery	1.00
15	327479	CR2016 Coin Cell Battery Kit	.80
16	327480	CR2032 Coin Cell Battery Kit	.80
17	327481	AAA Battery Kit	2.50
18	326670	Battery Pack	16.00



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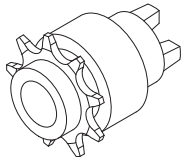
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Battery Pack contains the following:

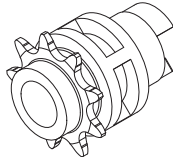
- (6) MN-21 12V
- (6) CR2016 Coin Cell
- (6) CR2032 Coin Cell
- (4) AAA

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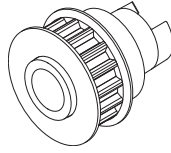
Sprockets



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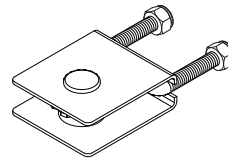


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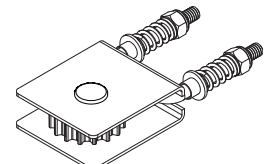


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Idlers

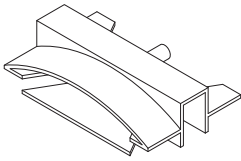


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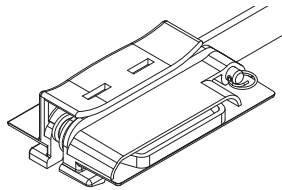


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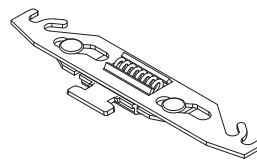
Trolleys



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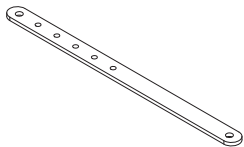


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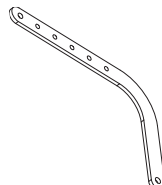


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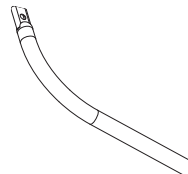
Door Arms



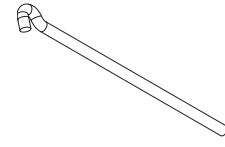
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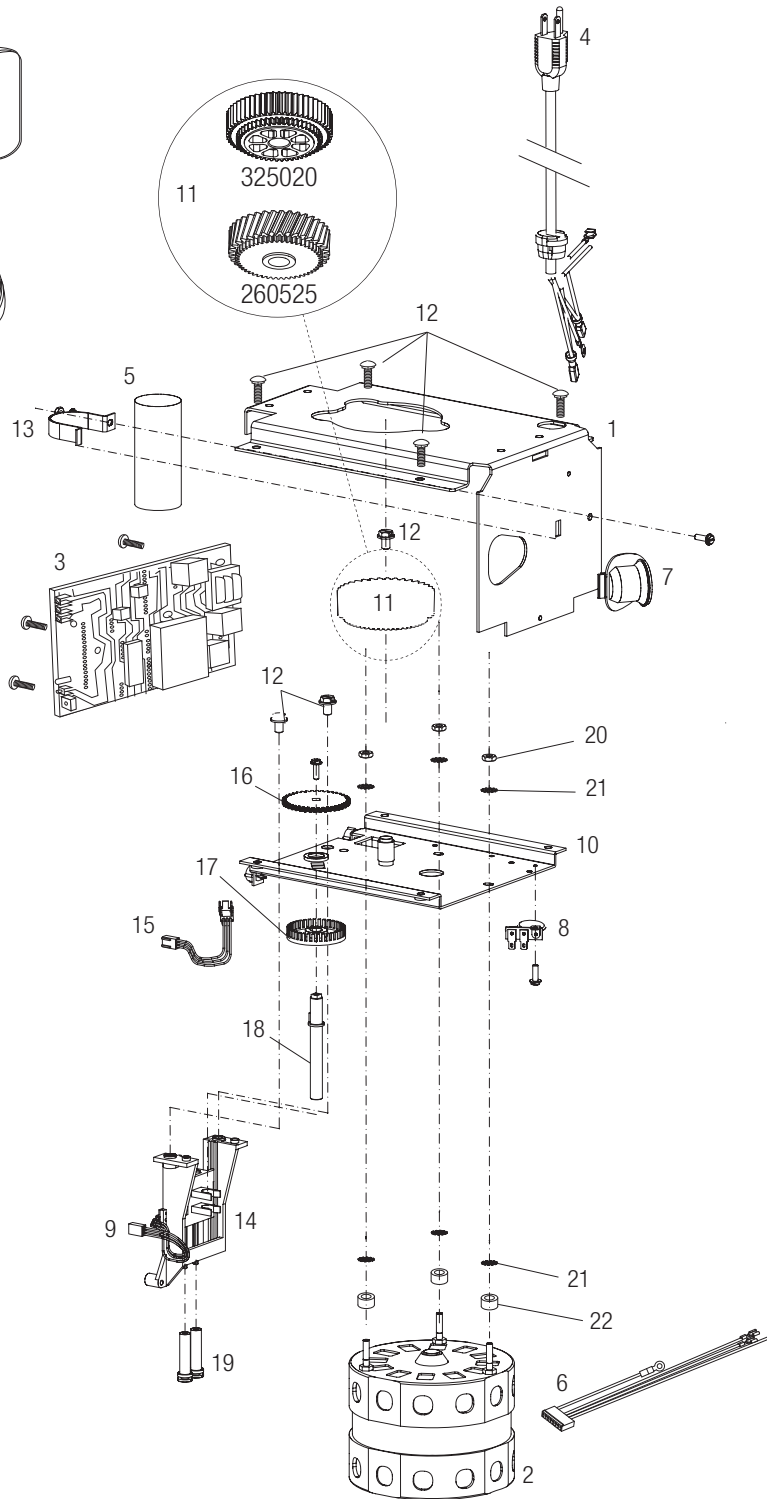
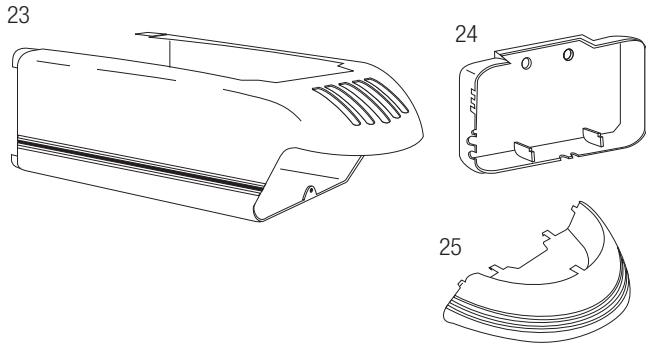
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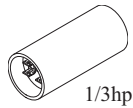
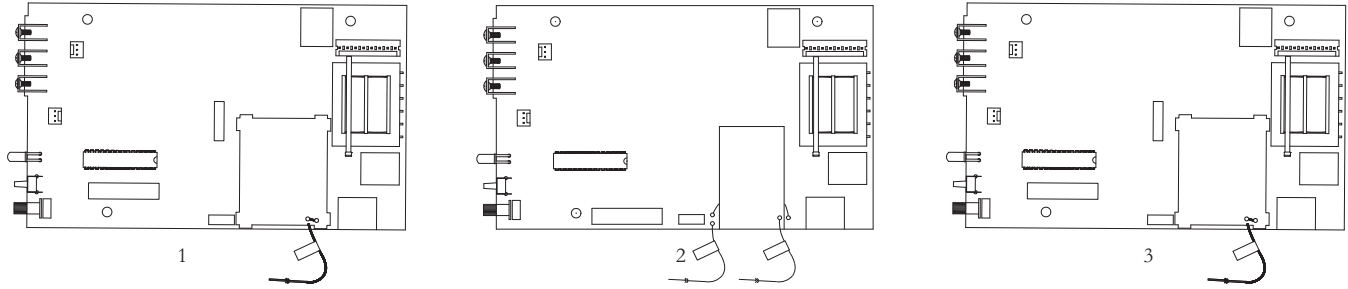
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Key	Part	Description	Price
1	305894	Chain Sprocket, 4 Cog	1.36
2	325022	Chain Sprocket, 2 Cog	3.45
3	325687	Belt Sprocket, 2 Cog	5.87
4	318113	Idler Assembly, Chain	12.59
5	320704	Idler Assembly, Belt	13.25
6	198077	Trolley, Steel	35.00
7	320697	Trolley, Universal	19.00
8	309960	Trolley Latch	3.07
9	220977	Release Cord	3.00
10	324273	Door Arm Upper	6.10
11	324272	Door Arm Lower	6.10
12	252107	Standard Tube Arm	4.85
13	229858	Standard Rod Arm	4.15
14	220966	Classicdrive 7' Replacement Chain w/ Fasteners	40.00
15	320700	Classicdrive 7' Replacement Belt w/ Fasteners	82.00
16	325682	Prodrive 7' Replacement Chain w/ Fasteners	45.00
17	325683	Prodrive 8' Replacement Chain w/ Fasteners	48.00
18	325684	Prodrive 10' Replacement Chain w/ Fasteners	51.00
19	325685	Prodrive 7' Replacement Belt w/ Fasteners	87.00
20	325686	Prodrive 8' Replacement Belt w/ Fasteners	90.00
21	325572	Prodrive 10' Replacement Belt w/ Fasteners	93.00

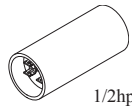
Motor Head



Key	Part	Description	Price
1	157167	Frame	3.26
2	325017	Motor 1/2 HP	82.51
3	306131	Motor Control Board	56.98
4	306364	Power Supply Cord	6.00
5	260570	Capacitor 1/2 HP	14.00
6	306486	Wiring Harness	1.93
7	269028	Light Socket	2.10
8	252994	MOV Surge Suppressor	3.75
9	252993	Limit Switch	3.94
10	325567	Sub-Frame	5.61
11	325020	Gear Driven, 2 cog	19.00
11	260525	Gear Driven, 4 cog	19.00
12	251248	Screw 1/4" -20x3/8"	0.10
13	301675	Capacitor Clamp	2.00
14	252092	Limit Assembly	15.00
15	249321	LED Interrupter	3.03
16	260556	Limit Driver Gear	1.04
17	157039	Interrupter Disk	0.99
18	260557	Shaft, Limit Driver	1.04
19	157055	Limit Adjuster	0.49
20	157666	Hex Nut # 10-32	0.49
21	157585	Lock Washer #10	0.10
22	157496	Nylon Motor Spacer	0.99
23	325066	Housing (Blue)	18.50
23	325092	Housing (Black)	18.50
24	325067	End Cap (Blue)	12.50
24	325093	End Cap (Black)	12.50
25	260552	Lens	5.00



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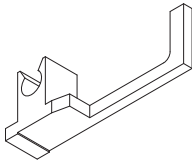
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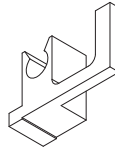
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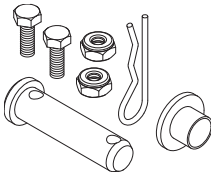


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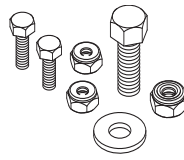


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Hardware



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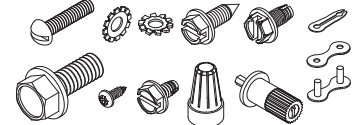
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Key	Part	Description	Price
1	306131	Motor Control Board 372MHZ without Z-wave	56.98
2	306132	Motor Control Board 303 & 372MHZ without Z-wave	56.98
3	327320	Motor Control Board 372 MHZ with Z-Wave	84.00
4	260572	Starter Cap 1/3hp	14.00
5	260563	Starter Cap 1/2hp	14.00
6	252993	Limit Switch	3.94
7	252994	M.O.V.	3.75
8	326667	Down Force Adjustment Knob	2.00
9	260554	Upper Limit Trigger	3.41
10	260559	Lower Limit Trigger	3.41
11	157055	Limit Adjuster, Screw Cap	0.49
12	269028	Light Socket	2.10

13	326208	Trolley Hardware Kit, Dual Grip Clevis Pin	2.81
14	321130	Trolley Hardware Kit 3/8" - 16 Bolt and Nut	1.48
15	326668	Master Link Assembly	2.50
16	326669	Wire Nuts	0.99
17	326666	Fastener Kit, Prodrive	3.18

Parts included in the Fastener Kit, Prodrive are:

(2)Screw #6-32 x 5.8 slotted rd hd	(4)Screw Hex hd #8 x 1/2
(2)Screw 1/4-20 x 5/8	(2)Screw #2 x 1/4 rd hd philips
(2)Screw Hex hd #6-32 x 1/4	(2)Nut KEP #6-32
(2)Washer Toothed #6	(10) Wire Nut gray non-winged
Down Force Adjustment Knob	Master Link Assembly

Troubleshooting

Prodrive, Quantum and Classic Troubleshooting Guide

Models: 3220C, 3222C, 3224C, 3320B, 3322B, 3324B3014, 3018, 3214, 3316, 3414, 3514

Action	Operator LED Flash Sequence	Convenience Light Flash Sequence	Cause	Correction
Normal Operations				
Plug in Power	On-Off one time	On-Off one time	Normal Operation	N/A
Plug in Power (3414 & 3514 only)	On-Off, On-Off one sequence	On-Off, On-Off one sequence	Normal Operation for dual frequency MCB, indicates 303 Mhz Receiver is active	
Operator sitting idle	1/2 second on, 6 sec off, continuously repeats	None	Normal Operation, indicates operator is powered up and micro-controller is working	N/A
Press and release program switch	On for 60 sec.	On for 60 sec.	Operator placed in program mode to learn transmitter, or wall station, or KEP	N/A
Operator in Program Mode, press and release WS light switch, TX switch, or enter KEP PIN sequence	3 quick flashes	3 quick flashes	Operator successfully learned RF transmitting device	N/A
Press and release TX or WS button	On for 1sec, then off	Transmitting device switch dependent	Normal Operation, device is programmed to operator	N/A
Press and release Program Switch three times	1-5 flashes, pause and repeat continuously	None	Puts operator in opening force adjust mode, 1 flash = minimal force, 3 = mid point setting (factory default), 5 = maximum opening force	See manual for changing force
Press and Hold Program Switch for 10 seconds	On for 10 sec, followed by 3 quick flashes	Off for 10 sec, followed by 3 quick flashes	Normal Operation, successful clear out of all learned RF devices.	N/A
Abnormal Conditions				
Press and hold switch on transmitting device	None	None	TX or WS not activated	Activate TX by either 10/5 activation or two second activation dependent on age of remote.
Press and hold switch on transmitting device	Constant flashing	None	Unlearned RF transmitting device	Program RF device to operator
Press and release up/down switch, or TX button, no motor start. Opener will not start with short across PB and COM	On, then off once	Turns on	Operator in vacation mode	5 function WS: Press Up/Down and Pet Function simultaneously 7 Function: Place Vacation Switch in the unlock position.
From full open Door travels downward less than 12" and reverses to full open, closes with constant PB closure	1 sec on/ 1 sec off, repeats for 60 sec.	1 sec on/ 2 sec off, repeats for 60 sec.	Photo Beam issue	Check apertures for cleanliness, check connections, ensure stripped wires are paired and solids are paired, check beam alignment, if pre-wired garage check splices.
From full open Door travels downward less than 12" and reverses to full open	2 sec on/ 1 sec off, repeats for 60 sec.	2 sec on/ 2 sec off, repeats for 60 sec.	Contact obstruction detected or insufficient down force.	Check for binding, particularly at back hangs and radius
Dependent on door position door travels up or down briefly and stops, next activation operator does not respond	3 flashes, pause, repeats sequence	None	Defective feedback sensor/circuitry	1. Verify black lead from motor is connected to chassis on left side of limit assembly. 2. Replace motor head
From open position motor starts and door travels very briefly, less than 2 inches. From closed position door travels 6" - 18" up each activation to point door is at open limit.	None	2 sec on/2 sec off, repeats sequence	Defective R.P.M. sensor/circuitry	1. Verify white connector is connected to Motor Control Board. 2. Replace R.P.M. sensor/motor head

