



# Cordless Screwdriver and Nutrunner

QX Connect Series

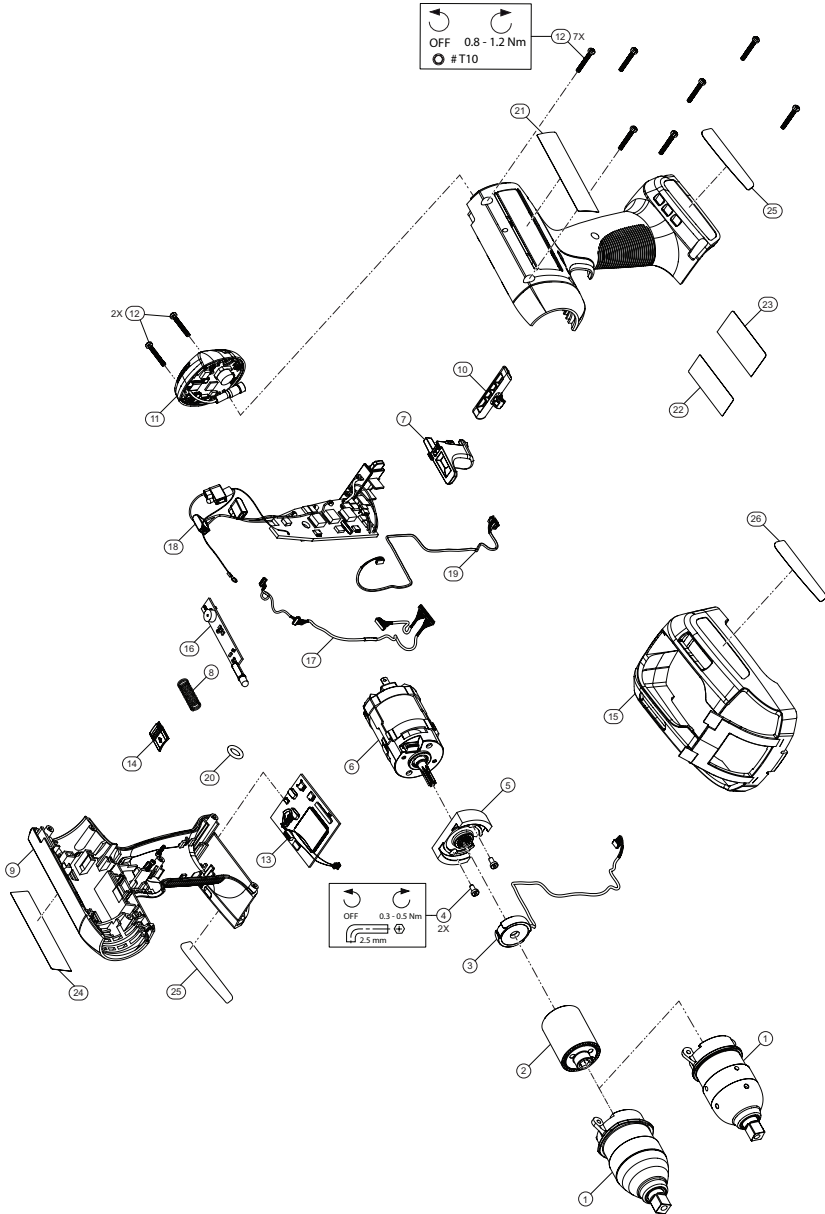
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## Parts Information



Save These Instructions

**QX{ }2P{ } Housing Assembly - Exploded View**



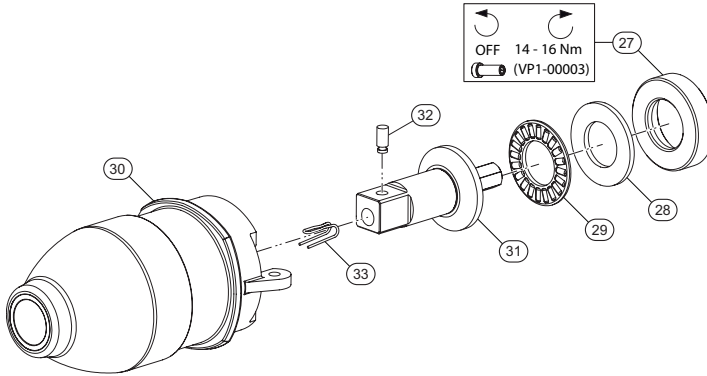
**QX{ }2P{ } Housing Assembly - Parts List**

| Item | Part Description  | Part Number (CCN)         |
|------|---|---------------------------|
| 1    | Gear Case Assembly, 1/4" Quick Change   | VP1-A8-Q4 (47103320)      |
|      | Gear Case Assembly, 1/4" Square Drive   | VP1-A8-S4 (47103312)      |
|      | Gear Case Assembly, 3/8" Square Drive   | VP1-A8-S6 (47104179)      |
|      | Gear Case Assembly, 1/4" Quick Change (for EU models only)  | VP1-A8-AQ4                |
|      | Gear Case Assembly, 1/4" Square Drive (for EU models only)  | VP1-A8-AS4                |
|      | Gear Case Assembly, 3/8" Square Drive (for EU models only)  | VP1-A8-AS6                |
| 2    | Gear Pack Assembly, QX{ }2PT004{ } Series   | TA-VP1T-037-13P18         |
|      | Gear Pack Assembly, QX{ }2PT008{ } Series   | TA-VP1T-037-17P1          |
|      | Gear Pack Assembly, QX{ }2PT012{ } Series   | TA-VP1T-037-26P6          |
|      | Gear Pack Assembly, QX{ }2PT018{ } and QX{ }2PT024{ } Series  | TA-VP1-2169-16C           |
| 3    | Transducer Assembly, QX{ }2PT004{ }, QX{ }2PT008{ }, and QX{ }2PT012{ } Series                        | VP1-A756 (47107073)       |
|      | Transducer Assembly, QX{ }2PT018{ } and QX{ }2PT024{ } Series   | VP1-A756-18 (47515463001) |
| 4    | Screw (M3 x 0.5), (2 required)  | CPS2-667-735 (45589140)   |
| 5    | Motor Mount   | TP-VP1-108                |
| 6    | Motor Assembly  | TA-VP1-054                |
| 7    | Trigger Assembly  | TP-VP1-A093RD             |
| 8    | Spring  | VP1-726 (47088356)        |
| 9    | Handle Assembly (both halves)   | VP1-A59 (48394266)        |
| 10   | Switch, F/R Assembly  | TP-VP1-A075RD             |
| **11 | Back Cap Assembly, QX{ }D2P{ } Series   | See Pistol Back Cap Table |
|      | Back Cap Assembly, QX{ }N2P{ } Series   |                           |
|      | Back Cap Assembly, QXWD2P{ } Series   |                           |
| *    | Keypad  | TP-VA1-070RD              |
| *    | OLED Display  | VP1-888-C (47526666)      |
| 12   | Screw (9 required)  | VP1-105 (47111778)        |
| 13   | Motor Controller Board, 20V QX{ }2PT004{ }, QX{ }2PT008{ }, QX{ }2PT012{ }, and QX{ }2PT018{ } Series | TA-VP1T-499-1             |
|      | Motor Controller Board, 40V QX{ }2PT024{ } Series   | TA-VA2T-499-1             |
| 14   | USB Cover   | TP-VP1T-441RD             |
| 15   | Retainer Battery, QX{ }2P{ }J{V} and QX{ }2P{ }H{ }   | VP1-202V (47506474001)    |
| 16   | PCB, Trigger and F/R  | 84737-A499-5 (47101332)   |
| 17   | Internal Interface Cable  | 84737-CABLE-1 (47106117)  |
| 18   | Power Board Assembly, 20V Pistol  | TA-VP1T-499-3             |
| 19   | Motor Hall Cable  | 84737-CABLE-2 (47106299)  |
| 20   | O-Ring, PCB   | VP1-282 (47104211)        |
| 21   | Name Plate Label  | TL-VP1T-301-P             |
| 22   | Certification Label   | TL-VP1T-300               |
| 23   | Information Label   | TL-VP1T-486               |
| 24   | Warning Label, QX{ }2P{ }J{P} and QX{ }2P{ }E{ } Series   | TL-VP1T-099-P             |
|      | Warning Label, QX{ }2P{ }J{V} and QX{ }2P{ }H{ } Series   | TL-VP1T-099-V             |
| 25   | Tool Foot Label, QX{ }2P{ }J{P} Series  | TL-VP1T-099-3             |
|      | Tool Foot Label, QX{ }2P{ }E{ } Series  | TL-VP1T-099-4             |
|      | Tool Foot Label, QX{ }2P{ }J{V} Series  | TL-VP1T-099-1             |
|      | Tool Foot Label, QX{ }2P{ }H{ } Series  | TL-VP1T-099-2             |
|      | Tool Foot Label, QXWD2P{ }J{P} Series   | TL-VP1T-099-5             |
|      | Tool Foot Label, QXWD2P{ }E{ } Series   | TL-VP1T-099-6             |
| 26   | Retainer Foot Label, QX{ }2P{ }J{V} and QX{ }2P{ }H{ } Series   | VP1-99V-2 (47508447001)   |
| *    | IR # 69 Grease  | VP1-11B (48413157)        |

\* Indicates not illustrated.

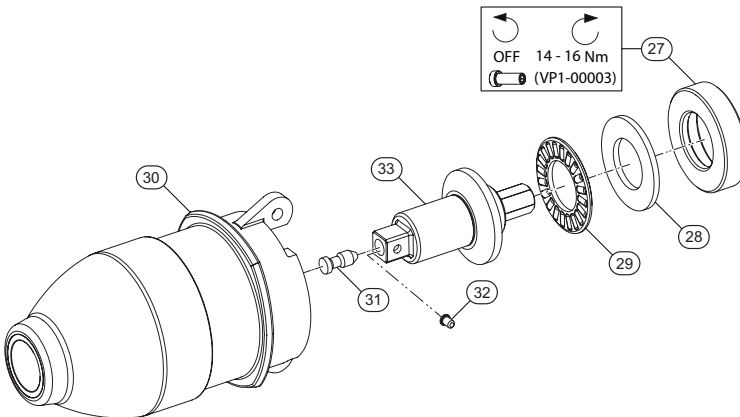
\*\* Contact an **Ingersoll Rand** certified Service Center or your distributor to program this tool. All display assemblies are shipped in default mode and need to be programmed before use.

**VP1-A8-S6 3/8" Square Gear Case Assembly QX{ }2PT{ }S06 Series**



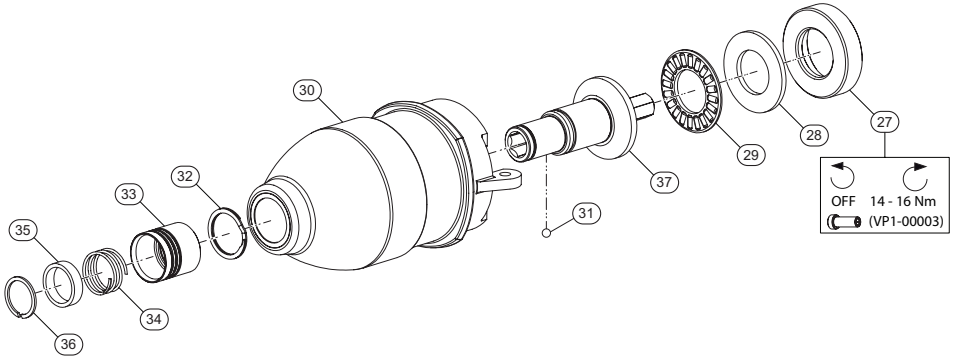
| Item | Part Description      | Part Number (CCN)    |
|------|-----------------------|----------------------|
| 27   | Nut                   | VP1-305 (47112230)   |
| 28   | Thrust Washer         | DAA6A-107 (04694006) |
| 29   | Thrust Bearing        | R1610-105 (03119559) |
| 30   | Gear Housing Assembly | VP1-A40 (47103882)   |
| 31   | Spindle, 3/8" Square  | VP1-807-S6           |
| 32   | Retainer              | 5020-716 (03046679)  |
| 33   | Spring                | 401-718 (03060993)   |

**VP1-A8-S4 1/4" Square Gear Case Assembly QX{ }2PT{ }S04 Series**



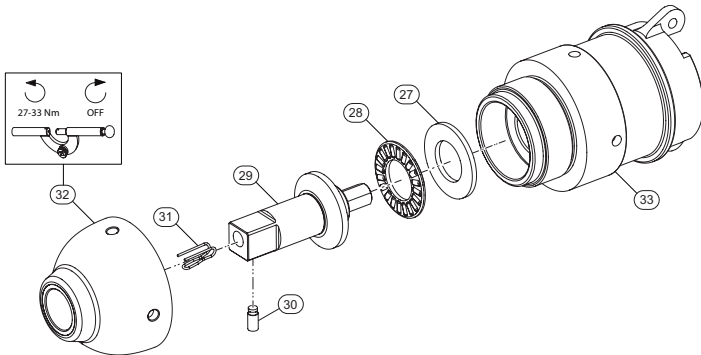
| Item | Part Description      | Part Number (CCN)    |
|------|-----------------------|----------------------|
| 27   | Nut                   | VP1-305 (47112230)   |
| 28   | Thrust Washer         | DAA6A-107 (04694006) |
| 29   | Thrust Bearing        | R1610-105 (03119559) |
| 30   | Gear Housing Assembly | VP1-A40 (47103882)   |
| 31   | Pin                   | 47028 (04130266)     |
| 32   | Insert (Rubber)       | 46749 (04124632)     |
| 33   | Spindle, 1/4" Square  | VP1-807-S4           |

**VP1-A8-Q4 Quick Change Gear Case Assembly QX{ }2PT{ }04 Series**



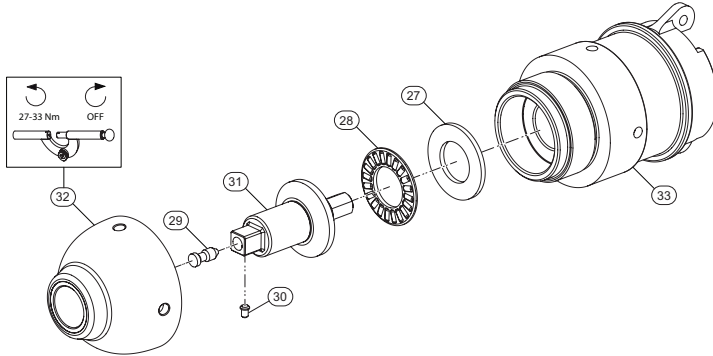
| Item | Part Description       | Part Number (CCN)         |
|------|------------------------|---------------------------|
| 27   | Nut                    | VP1-305 (47112230)        |
| 28   | Thrust Washer          | DAA6A-107 (04694006)      |
| 29   | Thrust Bearing         | R1610-105 (03119559)      |
| 30   | Gear Housing Assembly  | VP1-A40 (47103882)        |
| 31   | Ball                   | R000B-263 (03095031)      |
| 32   | Multi Turn Snap Ring   | 182A13-CXRSN50 (95994521) |
| 33   | Collar, Quick Change   | CPS2-930 (45551827)       |
| 34   | Spring                 | TRH-931 (04681615)        |
| 35   | Spacer, Quick Change   | CPS2-244 (45555125)       |
| 36   | Retaining Ring         | VP1-118 (47512717)        |
| 37   | Spindle, Quick Connect | VP1-8-Q4 (47103346)       |

**VP1-A8-AS6 3/8" Square Gear Case Assembly QX { }2PT{ }S06 - EU Series**



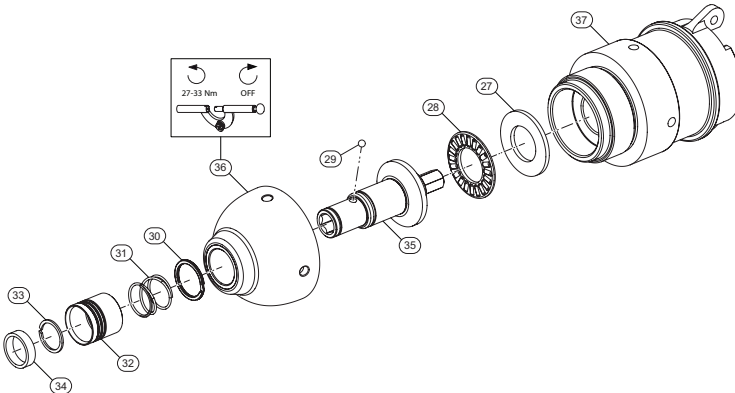
| Item | Part Description     | Part Number (CCN)    |
|------|----------------------|----------------------|
| 27   | Thrust Washer        | DAA6A-107 (04694006) |
| 28   | Thrust Bearing       | R1610-105 (03119559) |
| 29   | Spindle, 3/8" Square | VP1-807-S6           |
| 30   | Retainer             | 5020-716 (03046679)  |
| 31   | Spring               | 401-718 (03060993)   |
| 32   | Nose Piece Assembly  | TA-VP1T-531-2        |
| 33   | Gear Case            | TP-VP1-037-2         |

**VP1-A8-AS4 1/4" Square Gear Case Assembly QX { }2PT{ }S04 - EU Series**

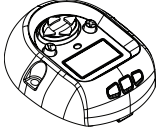
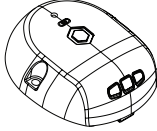


| Item | Part Description     | Part Number (CCN)    |
|------|----------------------|----------------------|
| 27   | Thrust Washer        | DAA6A-107 (04694006) |
| 28   | Thrust Bearing       | R1610-105 (03119559) |
| 29   | Insert (Rubber)      | 46749 (04124632)     |
| 30   | Pin                  | 47028 (04130266)     |
| 31   | Spindle, 1/4" Square | VP1-807-S4           |
| 32   | Nose Piece Assembly  | TA-VP1T-531-2        |
| 33   | Gear Case            | TP-VP1-037-2         |

**VP1-A8-AQ4 Quick Change Gear Case Assembly QX { }2PT{ }Q04 - EU Series**



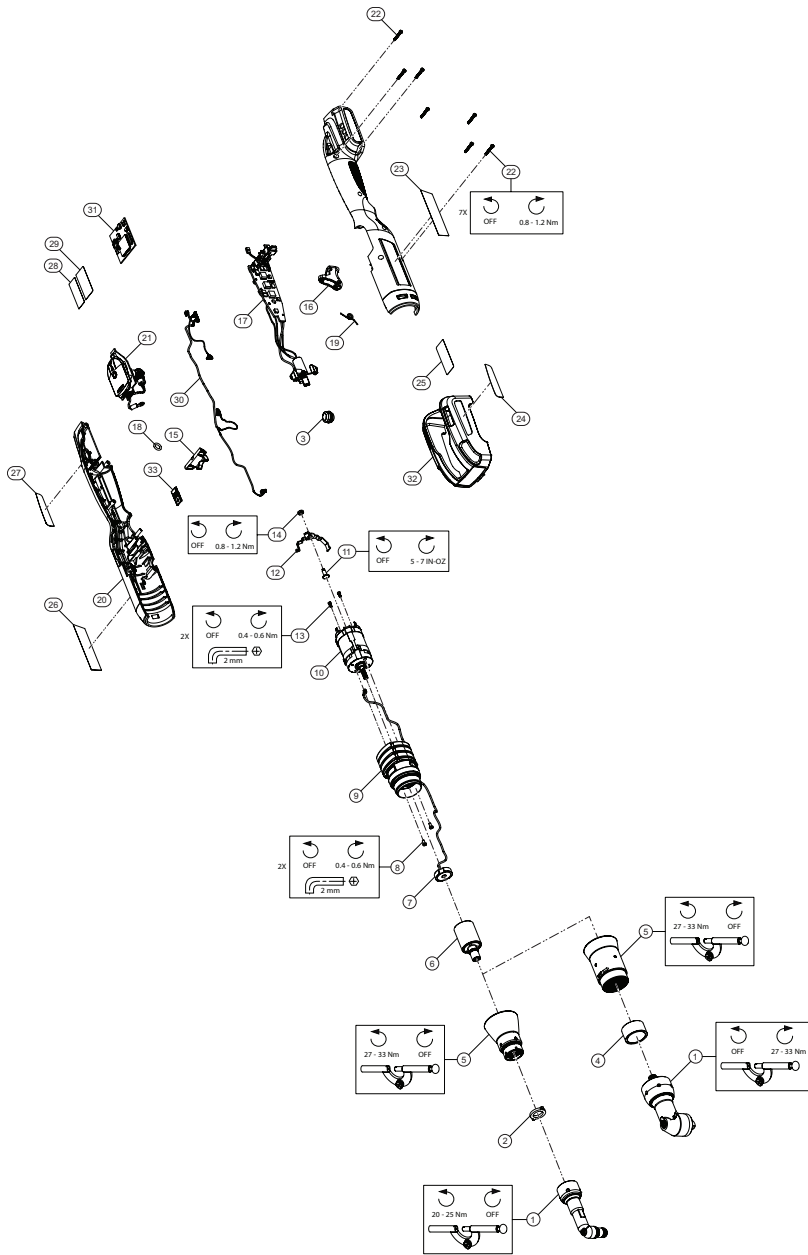
| Item | Part Description      | Part Number (CCN)        |
|------|-----------------------|--------------------------|
| 27   | Thrust Washer         | DAA6A-107 (04694006)     |
| 28   | Thrust Bearing        | R1610-105 (03119559)     |
| 29   | Ball                  | R000B-263                |
| 30   | Multi Turn Snap Ring  | 182A13CXRSN50 (95994521) |
| 31   | Spring                | TRH-931 (04681615)       |
| 32   | Collar, Quick Change  | CPS2-930 (45551827)      |
| 33   | Spacer, Quick Change  | CPS2-244 (45555125)      |
| 34   | Retaining Ring        | VP1-118 (47512717)       |
| 35   | Spindle Quick Connect | VP1-8-Q4 (47103346)      |
| 36   | Nose Piece Assembly   | TA-VP1T-531-2            |
| 37   | Gear Case             | TP-VP1-037-2             |

| Back Cap Assembly - 20V Pistol  |               |   |               |
|---|---------------|---|---------------|
| CCN (Part Number)   | Model Type    | CCN (Part Number)   | Model Type    |
| QXXD2PT000P000  | QXXD2P{ }P{ } | QXXN2PT000P000  | QXXN2P{ }P{ } |
| QXXD2PT000E000  | QXXD2P{ }E{ } | QXXN2PT000E000  | QXXN2P{ }E{ } |
| QXBD2PT000P000  | QXBD2P{ }P{ } | QXBN2PT000P000  | QXBN2P{ }P{ } |
| QXBD2PT000E000  | QXBD2P{ }E{ } | QXBN2PT000E000  | QXBN2P{ }E{ } |
| QXFD2PT000P000  | QXFD2P{ }P{ } | QXFN2PT000P000  | QXFN2P{ }P{ } |
| QXFD2PT000E000  | QXFD2P{ }E{ } | QXFN2PT000E000  | QXFN2P{ }E{ } |
| QXWD2PT000P000  | QXWD2P{ }P{ } | ---   | ---           |
| QXWD2PT000E000  | QXWD2P{ }E{ } | ---   | ---           |
|  |               |  |               |

**Suggested Tools**

| Tool Used          | Part Description                  | Where Used?                    |
|--------------------|-----------------------------------|--------------------------------|
| Torque Screwdriver | 2 Nm capacity                     | Housing and Motor Mount Screws |
| T10 Torx Bit       | ---                               | Housing Screws                 |
| Allen Wrench       | 2 mm                              | Motor Mount Screws             |
| Nylon Pick         | ---                               | O-Rings, Wires, etc.           |
| Torque Wrench      | 3/8" Square Drive, 20 Nm capacity | Gear Case Housing Nut          |
| Bearing Nut Tool   | IR Part # VP1-00003 (47128921)    | Gear Case Housing Nut          |

**QX{ }2A{ } Housing Assembly - Exploded View**



Use lithium-based, electrical contact grease with no particles for all electrical connections.



**QX{ }2A{ } Housing Assembly - Parts List**

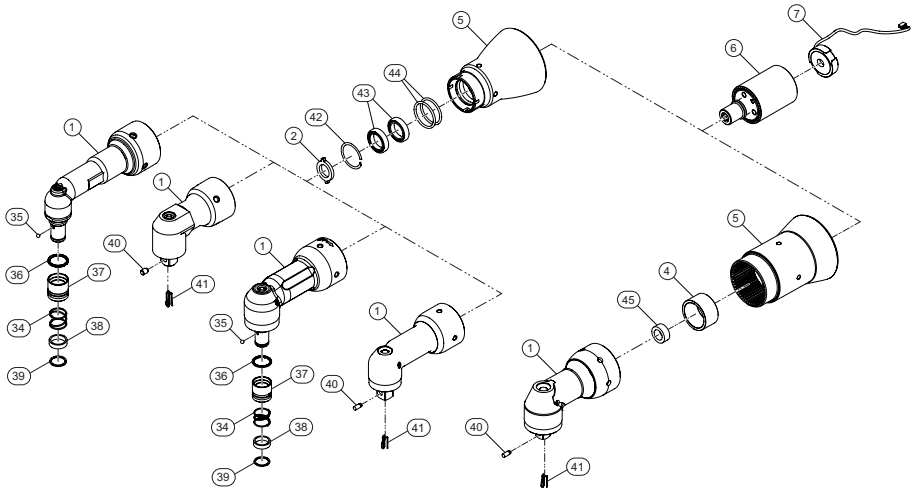
Table 1

| Item | Part Description               | Part Number (CCN)            | Item  | Part Description         | Part Number (CCN)            |
|------|--------------------------------|------------------------------|---|--------------------------|------------------------------|
| 1    | Angle Head Assembly            | See Table 2                  | *   | OLED Display             | VP1-888-C (47526666)         |
| 2    | Lock Spacer                    |                              | 22  | Screw (7 required)       | 47111778                     |
| 3    | Plug, F/R Blank                | VA1-556 (47522589001)        | 23  | Name Plate Assembly      | TA-VA1T-301-P                |
| 4    | Spacer                         | See Table 2                  | 24  | Retainer Foot Label      | VP1-99V-2 (47508447001)      |
| 5    | Gear Case Assembly             |                              | 25  | Retainer Warning Label   | VP1-99V (47506214001)        |
| 6    | Gear Pack Assembly             |                              | 26  | Warning Label            | TL-VA1T-099-V                |
| 7    | Transducer Assembly            |                              |   | Warning Label            | TL-VA1T-099-P                |
| 8    | Screw                          |                              | CPS2-667-735 (45589140)   | 27                       | Tool Foot Label, QX{ }2A{ }P |
| 9    | Motor Mount Assembly           | VA1-A40Y                     | Tool Foot Label, QX{ }2A{ }E                                      |                          | TL-VP1T-099-4                |
| 10   | Motor Assembly                 | TA-VP1-054                   | Tool Foot Label, QX{ }2A{ }V                                      |                          | TL-VP1T-099-1                |
| 11   | Screw, Grub                    | VA1-78 (47507397001)         | Tool Foot Label, QX{ }2A{ }H                                      |                          | TL-VP1T-099-2                |
| 12   | Motor Mount Support            | VA1-A28 (47504028001)        | Tool Foot Label, QXWD2A{ }P{ }                                    |                          | TL-VP1T-099-5                |
| 13   | Screw                          | 4751446001                   | Tool Foot Label, QXWD2A{ }E{ }                                    |                          | TL-VP1T-099-6                |
| 14   | Hex, Nut                       | 19M4J57M3 (45638756)         | 28  | Information Label        | TL-VP1T-300                  |
| 15   | Button, F/R                    | TP-VA1-075RD                 | 29  | Certification Label      | TL-VP1T-486                  |
| 16   | Trigger Assembly               | TP-VA1T-093RD                | 30  | Internal Interface Cable | VA1-505 (24471336)           |
| 17   | Power Board Assembly           | TA-VA1T-499-3                | 31  | Motor Control Board      | TA-VP1T-499-1                |
| 18   | O-Ring, PCB                    | VP1-282 (47104211)           | 32  | Battery Retention Device | VA1-202V (47521241001)       |
| 19   | Spring                         | VA1-726 (24362386)           | 33  | USB Cover                | TP-VA1-441RD                 |
| 20   | Housing Assembly               | VA1-A59 (4750731101)         | *   | IR # 69 Grease, 1lb      | VP1-1LB (48413157)           |
| **21 | Back Cap Assembly, QX{ }D2A{ } | See 20V Angle Back Cap Table | *   | IR # 67 Grease, 4oz      | 67-4T (04637336)             |
|      | Back Cap Assembly, QX{ }N2A{ } |                              | *   | IR # 67 Grease, 1lb      | 67-1LB                       |
|      | Back Cap Assembly, QXWD2A{ }   |                              | *   | IR # 67 Grease, 8lb      | 67-8LB                       |
|      |                                |                              | Grease Tube Head (for QX Angle tools. Use with 4 Oz Grease Tube.) | GTH-1 (04616124)         |                              |
| *    | Keypad                         | TP-VA1-070RD                 |   |                          |                              |

\* Indicates not illustrated.

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**QX{ }2A Attachment Components - Exploded View**

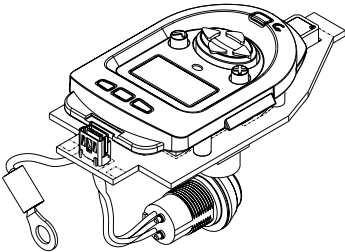
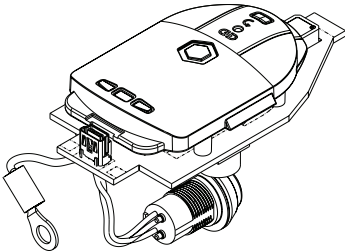


**Table 2**

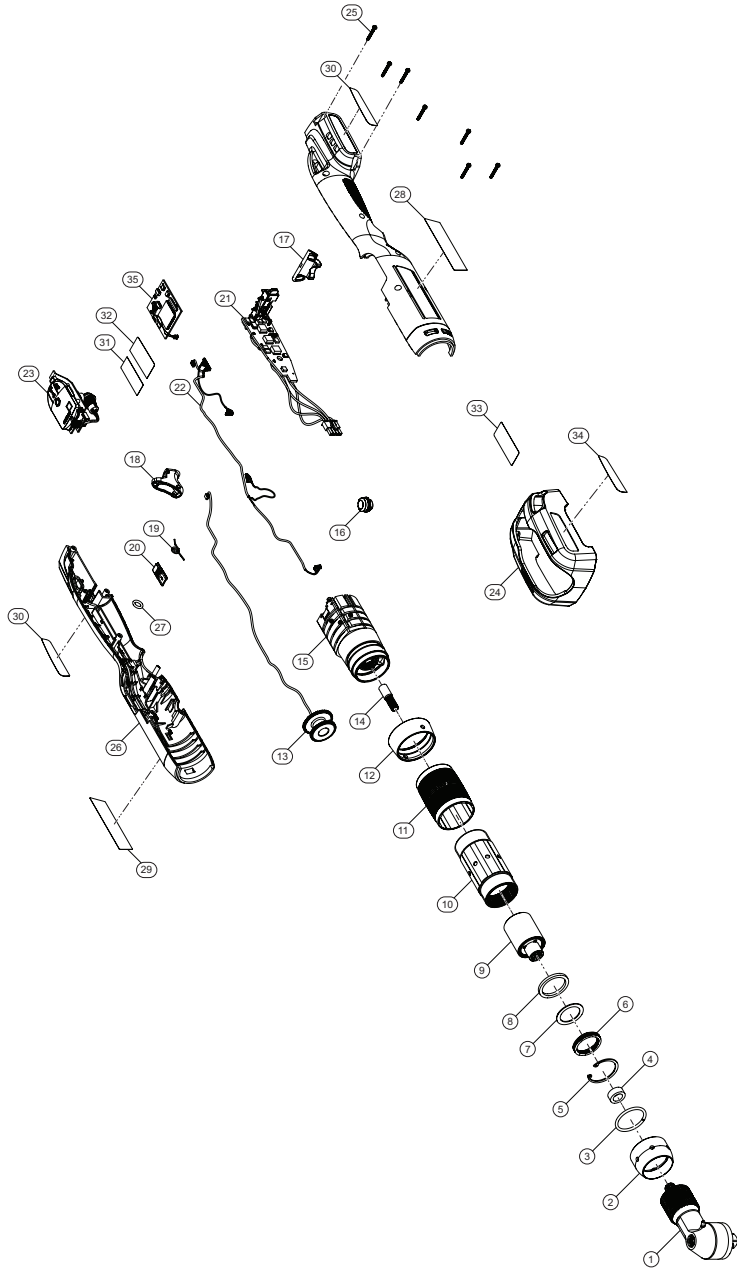
| Item | Part Description                | Part Number (CCN)            |                              |                            |                            |                            |                               |
|------|---------------------------------|------------------------------|------------------------------|----------------------------|----------------------------|----------------------------|-------------------------------|
|      |                                 | QX{ }2A{ }027{ }S06          | QX{ }2A{ }018{ }Q04          | QX{ }2A{ }018{ }S06        | QX{ }2A{ }015{ }S06        | QX{ }2A{ }010{ }S06        | QX{ }2A{ }005{ }Q04           |
| 1    | Angle Head Assembly             | GAA456K<br>(47524190001)     | CPS3Q4<br>(45601457)         | CPS3S6<br>(45601432)       | QAS-25-A550<br>(47152582)  | QAS-25-A550<br>(47152582)  | QAS-18-A550-SQ4<br>(48617062) |
| 2    | Lock Spacer                     | ---                          | CPS3-682<br>(45592193)       | CPS3-682<br>(45592193)     | QAS-682<br>(47151170)      | QAS-682<br>(47151170)      | QAS-682<br>(47151170)         |
| 4    | Spacer                          | VA1-80<br>(47515640001)      | ---                          | ---                        | ---                        | ---                        | ---                           |
| 5    | Gear Case Assembly              | VA1-180-AL<br>(47516176001)  | VA1-A37-CP<br>(24509523)     | VA1-A37-CP<br>(24509523)   | VA1-A37-RS<br>(24627010)   | VA1-A37-RS<br>(24627010)   | VA1-A37-RS<br>(24627010)      |
| 6    | Gear Pack Assembly              | TA-VA1T-037-39P7             | TA-VA1T-037-26P6             | TA-VA1T-037-26P6           | TA-VA1T-037-26P6           | TA-VA1T-037-17P1           | TA-VA1T-037-13P18             |
| 7    | Transducer Assembly             | VA1-A756-27<br>(47515475001) | VA1-A756<br>(24358798)       | VA1-A756<br>(24358798)     | VA1-A756<br>(24358798)     | VA1-A756<br>(24358798)     | VA1-A756<br>(24358798)        |
| 34   | Bit Retaining Spring            | ---                          | TRH-931<br>(04681615)        | ---                        | ---                        | ---                        | TRH-931<br>(04681615)         |
| 35   | Bit Retaining Ball              | ---                          | R000B-263<br>(03095031)      | ---                        | ---                        | ---                        | R000B-263<br>(03095031)       |
| 36   | Multi Turn Snap Ring            | ---                          | 182A13-CXRSN50<br>(95994521) | ---                        | ---                        | ---                        | 182A13-CXRSN50<br>(95994521)  |
| 37   | Collar, Quick Change            | ---                          | CPS2-930<br>(45551827)       | ---                        | ---                        | ---                        | CPS2-930<br>(45551827)        |
| 38   | Spacer, Quick Change            | ---                          | CPS2-244<br>(45555125)       | ---                        | ---                        | ---                        | CPS2-244<br>(45555125)        |
| 39   | Retaining Ring                  | ---                          | VP1-118<br>(47512717)        | ---                        | ---                        | ---                        | VP1-118<br>(47512717)         |
| 40   | Socket Retaining Pin            | 5020-716<br>(03046679)       | ---                          | 5020-716<br>(03046679)     | 5020-716<br>(03046679)     | 5020-716<br>(03046679)     | ---                           |
| 41   | Socket Retaining Spring         | 401-718<br>(03060993)        | ---                          | 401-718<br>(03060993)      | 401-718<br>(03060993)      | 401-718<br>(03060993)      | ---                           |
| 42   | Retaining Ring                  | ---                          | 184A13CXUR81<br>(96955059)   | 184A13CXUR81<br>(96955059) | 184A13CXUR81<br>(96955059) | 184A13CXUR81<br>(96955059) | 184A13CXUR81<br>(96955059)    |
| 43   | Bearing Spindle<br>(2 required) | ---                          | CPS2-22<br>(45552809)        | CPS2-22<br>(45552809)      | CPS2-22<br>(45552809)      | CPS2-22<br>(45552809)      | CPS2-22<br>(45552809)         |
| 44   | O-Ring (2 required)             | ---                          | 20A11CMC018<br>(96955042)    | 20A11CMC018<br>(96955042)  | 20A11CMC018<br>(96955042)  | 20A11CMC018<br>(96955042)  | 20A11CMC018<br>(96955042)     |
| 45   | Spacer                          | GEA40-591<br>(80119605)      | ---                          | ---                        | ---                        | ---                        | ---                           |

| Back Cap Assembly - 20V Angle |               |                |               |
|-------------------------------|---------------|----------------|---------------|
| Part Number                   | Model Type    | Part Number    | Model Type    |
| QXXD2AT000P000                | QXXD2A{ }P{ } | QXXN2AT000P000 | QXXN2A{ }P{ } |
| QXXD2AT000E000                | QXXD2A{ }E{ } | QXXN2AT000E000 | QXXN2A{ }E{ } |
| QXBD2AT000P000                | QXBD2A{ }P{ } | QXBN2AT000P000 | QXBN2A{ }E{ } |
| QXBD2AT000E000                | QXBD2A{ }E{ } | QXBN2AT000E000 | QXBN2A{ }P{ } |
| QXFD2AT000P000                | QXFD2A{ }P{ } | QXFN2AT000P000 | QXFN2A{ }P{ } |
| QXFD2AT000E000                | QXFD2A{ }E{ } | QXFN2AT000E000 | QXFN2A{ }E{ } |
| QXWD2AT000P000                | QXWD2A{ }P{ } | ---            | ---           |
| QXWD2AT000E000                | QXWD2A{ }E{ } | ---            | ---           |

**QX{ }5A{ } Housing Assembly - Exploded View**



Use lithium-based, electrical contact grease with no particles for all electrical connections.

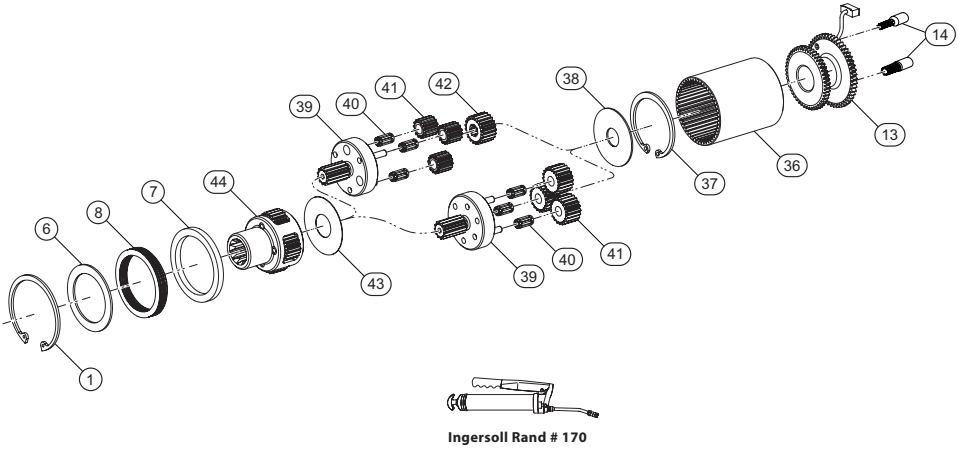
**QX{ }5A{ } Housing Assembly - Parts List**

| Item | Part Description   | Part Number (CCN)        | Item                        | Part Description  | Part Number (CCN)            |
|------|--|--------------------------|-----------------------------|---|------------------------------|
| 1    | Angle Head Assembly:<br>QX{ }5A{ }020 and QX{ }5A{ }030                            | GAA2S6-H (47527606001)   | 21                          | Power Board Assembly  | TA-VA2T-499-3                |
|      | Angle Head Assembly:<br>QX{ }5A{ }35{ }508   | GAA4S8-H (47527607001)   | 22                          | Internal Interface Cable  | VA1-505 (24471336)           |
|      | Angle Head Assembly:<br>QX{ }5A{ }035{ }506  | GAA4S6-H (47527608001)   | **23                        | Back Cap Assembly:<br>QX{ }D5A{ }   | See 40V Angle Back Cap Table |
|      | Angle Head Assembly:<br>QX{ }5A{ }040 and QX{ }5A{ }080                            | GAA5S8-H (47527609001)   |                             | Back Cap Assembly:<br>QX{ }N5A{ }   |                              |
| 2    | Coupling Nut   | GEA40-27 (22041180)      | *                           | Keypad  |                              |
| 3    | Coupling Nut Retainer  | DAA4-29 (04341368)       | *                           | OLED Display  | VP1-888-C (47526666)         |
| 4    | Spacer   | GEA40-591 (80119605)     | 24                          | Battery Retainer Device   | VA1-220V (47521241001)       |
| 5    | Retaining Ring   | W64-118 (03084266)       | 25                          | Screw   | VP1-105 (47111778)           |
| 6    | WSHR-Gear Retainer   | DEM40-81 (04569752)      | 26                          | Housing Assembly  | VA2-A59 (47518205001)        |
| 7    | Seal, Grease   | GEA40-248 (80106958)     | 27                          | O-Ring, PCB   | VP1-282 (47104211)           |
| 8    | Spring, Wave (1.375 O.D)   | GEA40-250 (80106982)     | 28                          | Name Plate Label  | TL-VA1T-301-P                |
| 9    | Gear Pack Assembly:<br>QX{ }5A{ }020   | GEA40-17-M37 (22038186)  | 29                          | Warning Label: QX{ }5A{ }JV   | TL-VA1T-099-V                |
|      | Gear Pack Assembly:<br>QX{ }5A{ }030   | GEA40-22-M37 (22038178)  |                             | Warning Label: QX{ }5A{ }JP   | TL-VA1T-099-P                |
|      | Gear Pack Assembly:<br>QX{ }5A{ }035 and QX{ }5A{ }040                             | GEA40-28-M37 (22038160)  | 30                          | Tool Foot Table, QX{ }5A{ }JV   | TL-VP1T-099-1                |
|      | Gear Pack Assembly:<br>QX{ }5A{ }080   | GEA40-40-M37 (22036503)  |                             | Tool Foot Table, QX{ }5A{ }JH   | TL-VP1T-099-2                |
| 10   | Gear Case Viper HT   | ---                      |                             | Tool Foot Table, QX{ }5A{ }JP   | TL-VP1T-099-3                |
| 11   | Sleeve, Gear Case  | VA2-145 (47511179001)    |                             | Tool Foot Table, QX{ }5A{ }JE   | TL-VP1T-099-4                |
| 12   | Cover, Motor Mount   | VA2-427 (47511904001)    | Tool Foot Table, QXW5A{ }JP | TL-VP1T-099-5   |                              |
| 13   | Transducer Assembly  | VA2-A756 (47518495001)   | Tool Foot Table, QXW5A{ }JE | TL-VP1T-099-6   |                              |
| *    | K7 Motor Assembly:<br>{ }20PS06, { }30PS06, { }30PS08,<br>{ }60PS08, and { }80PS08 | VA2-K53-7 (47539541001)  | 31                          | Certification Label   | TL-VP1T-300                  |
|      | K11 Motor Assembly:<br>{ }35PS06, { }35PS08, and { }40PS08                         | VA2-K53-11 (47539540001) | 32                          | Information Label   | TL-VP1T-486                  |
| 14   | Pinion   | ---                      | 33                          | Warning Label   | VP1-99V (47506214001)        |
| 15   | Motor Assembly   | ---                      | 34                          | Battery Holder Label  | VP1-99V-2 (47508447001)      |
| 16   | Plug, F/R Blank  | VA1-556 (47522589001)    | 35                          | Motor Controller Board  | TA-VA2T-499-1                |
| 17   | Button F/R Assembly  | TP-VA1-075RD             | *                           | IR # 67 Grease, 4 oz  | 67-4T                        |
| 18   | Trigger Assembly   | TP-VA1-093RD             | *                           | IR # 67 Grease, 1 lb  | 67-1 LB                      |
| 19   | Spring, Torsional  | VA1-726 (24362386)       | *                           | IR # 67 Grease, 8 lb  | 67 8 LB                      |
| 20   | USB Cover  | TP-VA1-441RD             | *                           | Grease Tube Head<br>(for QX{ }5A{ } Angle Tools. Use<br>with 4 Oz Grease Tube.) | GTH-1 (04616124)             |
|      |  |                          | *                           | IR # 170 Grease, 1 lb   | 170-1LB                      |
|      |  |                          | *                           | IR # 170 Grease, 8 lb   | 170-8LB                      |

\* Indicates not illustrated.

\*\* Contact an **Ingersoll Rand** certified Service Center or your distributor to program this tool. All display assemblies are shipped in default mode and need to be programmed before use.

**QX{ }5A Transducer Assembly and Gearing Components - Exploded View**

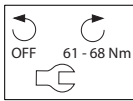


**QX{ }5A Transducer Assembly and Gearing Components - Parts List**

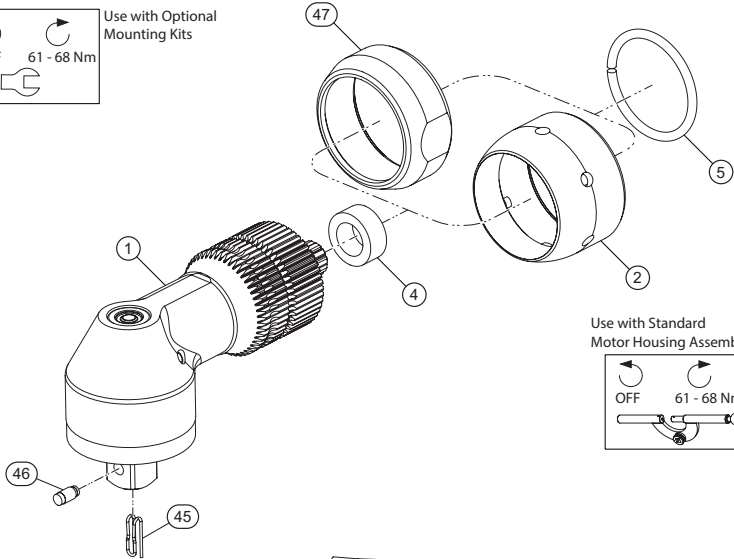
| Item | Part Description              | Part Number (CCN)         |   |                           |                          |
|------|-------------------------------|---------------------------|---|---------------------------|--------------------------|
|      |                               | QX{ }60P508 & QX{ }80P508 | QX{ }40P508, QX{ }35P508, & QX{ }35P506 | QX{ }30P508 & QX{ }30P506 | QX{ }20P506              |
| 14   | Pinion                        | ---                       | ---                                     | ---                       | ---                      |
| 13   | Transducer Assembly           | VA2-A756 (47518495001)    | VA2-A756 (47518495001)                  | VA2-A756 (47518495001)    | VA2-A756 (47518495001)   |
| 9    | Gear Pack Assembly            | GEA40-40-M37 (22036503)   | GEA40-28-M37 (22038160)                 | GEA40-22-M37 (22038178)   | GEA40-17-M37 (22038186)  |
| 36   | Ring Gear                     | GEA40-406 (22038079)      | GEA40-406 (22038079)                    | GEA40-406 (22038079)      | GEA40-406 (22038079)     |
| 37   | Retaining Ring                | 4E-118 (03079738)         | 4E-118 (03079738)                       | 4E-118 (03079738)         | 4E-118 (03079738)        |
| 38   | Spacer, Rear                  | GEA40-81 (22036495)       | GEA40-81 (22036495)                     | GEA40-81 (22036495)       | GEA40-81 (22036495)      |
| 39   | Gearhead Assembly (1st stage) | GEA40-A216-20 (22038004)  | GEA40-A216-19 (80096126)                | GEA40-A216-17 (80096142)  | GEA40-A216-14 (80096050) |
| *    | Gearhead                      | ---                       | ---                                     | ---                       | ---                      |
| *    | Planet Pin                    | ---                       | ---                                     | ---                       | ---                      |
| 40   | Needle Bearing (1st)          | 6WTM-500 (03800299)       | DAA40-500 (04008108)                    | 6WTM-500 (03800299)       | 6WTM-500 (03800299)      |
| 41   | Planet Gear (1st)             | 4RLL-10 (03822962)        | DEA31-10 (04282158)                     | 4RLN-10 (03822988)        | GEA40-10-14 (80098064)   |
| 42   | Sun Gear (1st)                | ---                       | ---                                     | DAA25-17 (04008140)       | GEA40-17-21 (22039317)   |
| 43   | Spacer                        | GEA40-80 (22041883)       | GEA40-80 (22041883)                     | GEA40-80 (22041883)       | GEA40-80 (22041883)      |
| 44   | Spindle Assembly (2nd stage)  | GEA40-A8-18 (22038145)    | GEA40-A8-18 (22038145)                  | GEA40-A8-18 (22038145)    | GEA40-A8-18 (22038145)   |
| *    | Spindle                       | ---                       | ---                                     | ---                       | ---                      |
| *    | Planet Pin                    | ---                       | ---                                     | ---                       | ---                      |
| *    | Planet Gear (2nd)             | ---                       | ---                                     | ---                       | ---                      |
| *    | Planet Bearing (2nd)          | ---                       | ---                                     | ---                       | ---                      |
| 7    | Grease Seal                   | GEA40-248 (80106958)      | GEA40-248 (80106958)                    | GEA40-248 (80106958)      | GEA40-248 (80106958)     |
| 8    | Wave Spring                   | GEA40-250 (80106982)      | GEA40-250 (80106982)                    | GEA40-250 (80106982)      | GEA40-250 (80106982)     |
| 6    | Retainer Washer               | DEM40-81 (04569752)       | DEM40-81 (04569752)                     | DEM40-81 (04569752)       | DEM40-81 (04569752)      |
| 1    | Retaining Ring                | W64-118 (03084266)        | W64-118 (03084266)                      | W64-118 (03084266)        | W64-118 (03084266)       |

\* Item included as part of sub-assembly.

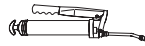
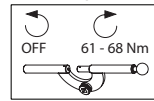
**QX{ }5A Angle Assembly Attachment - Exploded View**



Use with Optional Mounting Kits



Use with Standard Motor Housing Assemblies

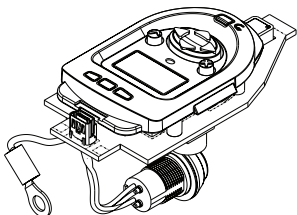
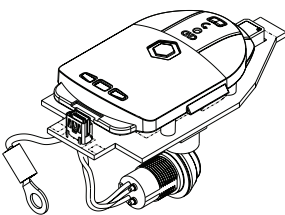


Ingersoll Rand # 67

**QX{ }5A Angle Head Assembly - Parts List**

| Item | Part Description                 | Part Number (CCN)                      |                           |                           |                           |
|------|----------------------------------|--|---------------------------|---------------------------|---------------------------|
|      |                                  | QX{ }80PS08, QX{ }60PS08 & QX{ }40PS08 | QX{ }35PS08 & QX{ }30PS08 | QX{ }35PS06               | QX{ }20PS06 & QX{ }30PS06 |
| 1    | Angle Assembly Attachment        | GAA5S8-H<br>(47527609001)              | GAA4S8-H<br>(47527607001) | GAA4S6-H<br>(47527608001) | GAA2S6-H<br>(47527606001) |
| 45   | Socket, Retaining Spring         | 5UHD-718<br>(03072766)                 | 5UHD-718<br>(03072766)    | 401-718<br>(03060993)     | 401-718<br>(03060993)     |
| 46   | Socket, Retaining Pin            | 804-716<br>(03064201)                  | 804-716<br>(03064201)     | 5020-716<br>(03046679)    | 5020-716<br>(03046679)    |
| 4    | Spacer                           | GEA40-591<br>(80119605)                | GEA40-591<br>(80119605)   | GEA40-591<br>(80119605)   | GEA40-591<br>(80119605)   |
| 2    | Coupling Nut, Long (with holes)  | GEA40-27<br>(22041180)                 | GEA40-27<br>(22041180)    | GEA40-27<br>(22041180)    | GEA40-27<br>(22041180)    |
| 47   | Coupling Nut, Short (with flats) | DAA4-27<br>(04341285)                  | DAA4-27<br>(04341285)     | DAA4-27<br>(04341285)     | DAA4-27<br>(04341285)     |
| 5    | Retainer                         | DAA4-29<br>(04341368)                  | DAA4-29<br>(04341368)     | DAA4-29<br>(04341368)     | DAA4-29<br>(04341368)     |

| Back Cap Assembly - 40V Angle |               |                |               |
|-------------------------------|---------------|----------------|---------------|
| Part Number                   | Model Type    | Part number    | Model Type    |
| QXXD5AT000P000                | QXXD5A{ }P{ } | QXXN5AT000P000 | QXXN5A{ }P{ } |
| QXXD5AT000E000                | QXXD5A{ }E{ } | QXXN5AT000E000 | QXXN5A{ }E{ } |
| QXBD5AT000P000                | QXBD5A{ }P{ } | QXBN5AT000P000 | QXBN5A{ }E{ } |
| QXBD5AT000E000                | QXBD5A{ }E{ } | QXBN5AT000E000 | QXBN5A{ }P{ } |
| QXFD5AT000P000                | QXFD5A{ }P{ } | QXFN5AT000P000 | QXFN5A{ }P{ } |
| QXFD5AT000E000                | QXFD5A{ }E{ } | QXFN5AT000E000 | QXFN5A{ }E{ } |
| QXWD5AT000P000                | QXWD5A{ }P{ } | ---            | ---           |
| QXWD5AT000E000                | QXWD5A{ }E{ } | ---            | ---           |

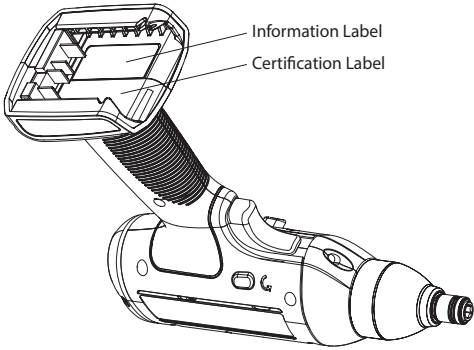



**QX{ }5A Suggested Tools**

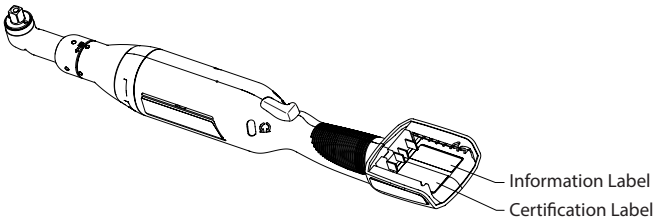
| Tool Used                 | Part Description                     | Where Used?               |
|---------------------------|--------------------------------------|---------------------------|
| Spanner Wrench            | IR Part # GEA40-478 (80114440)       | Coupling Nut              |
| Torque Wrench             | 1/2" Square Drive, 50 ft-lb capacity | General use               |
| Adjustable Wrench         | ---                                  | Coupling Nut (with flats) |
| Internal Snap Ring Pliers | ---                                  | General use               |
| Pick                      | ---                                  | O-Rings, Wires, etc.      |
| T10 Torx Bit              | ---                                  | Housing Screws            |



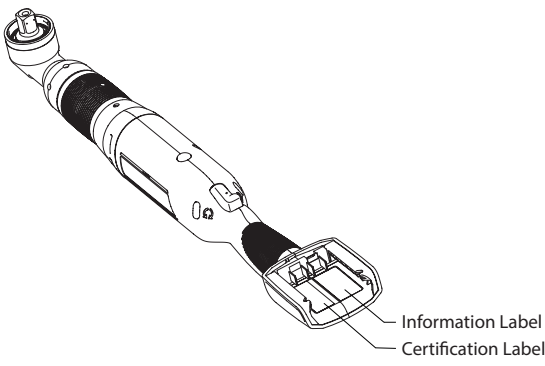
**Tool Assembly**



**QX{ }2P**



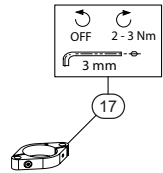
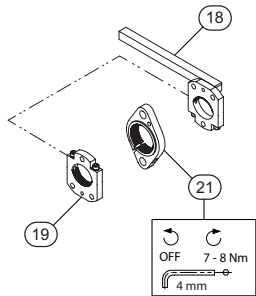
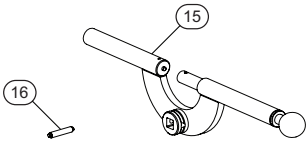
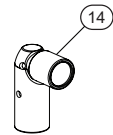
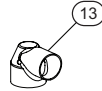
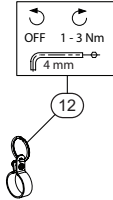
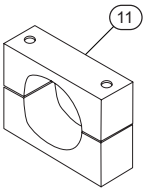
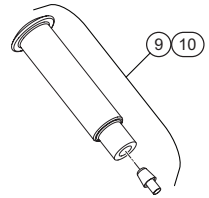
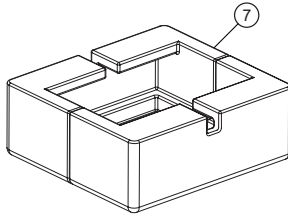
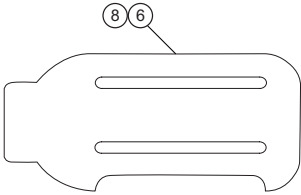
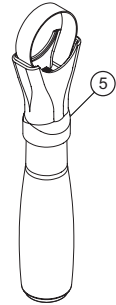
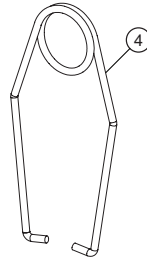
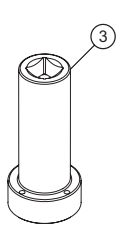
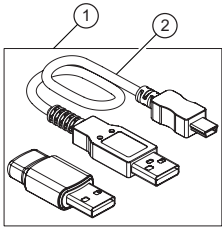
**QX{ }2A**



**QX{ }5A**

| Part Description    | Part Number (CCN) |
|---------------------|-------------------|
| Information Label   | TL-VP1T-486       |
| Certification Label | TL-VP1T-300       |

**QX Accessories (Optional)**



**QX Accessories (Optional) - Parts List**

| Item  | Part Description  | Part Number (CCN)          |
|-------|---|----------------------------|
| 1     | Communication Kit (USB Cable & ICS Software)  | 84737-COMM-KIT (48414460)  |
| 2     | USB Cable   | 84737-CABLE-USB (48412613) |
| *3    | Bearing Nut Tool  | VP1-00003 (47128921)       |
| *4    | Suspension Bail   | VP1-365 (48382147)         |
| *5    | Auxiliary Handle  | VP1-A48 (47107263)         |
| *6    | Motor Unit Kit  | VP1-K40                    |
| *7    | Gear Case Holding Fixture (use with Bearing Nut Tool, VP1-00003)                                  | VP1-A00004 (47603377001)   |
| **8   | Tool Boot with Covered Display (Red)  | VP1-BOOT-NP (47498430)     |
|       | Tool Boot with Open Display (White)   | VP1-WT-BOOT (47557360001)  |
|       | Tool Boot with Open Display (Red)   | VP1-BOOT (48411292)        |
| *9    | Retaining Ring Tool (for VP1-118)   | VP1-00001 (47126982)       |
| *10   | Retaining Ring Tool (for 182A13-CXR5N50)  | VP1-00002 (47128889)       |
| **11  | Holder  | VA1-239 (47526047)         |
| **12  | Tool Hanger Assembly  |                            |
|       | for Models { }005P{ }, { }010P{ }, { }015P{ }, and { }018P{ }                                     | CPS2-A365 (45592979)       |
|       | for Models { }020P{ }, { }027P{ }, { }030P{ }, { }035P{ }, { }040P{ }, { }060P{ }, and { }080P{ } | GEA40-A365 (45567849)      |
| **13  | Angle Head Sleeve   |                            |
|       | for Models { }018P{ } and { }020P{ }  | GEA40-170 (80095847)       |
|       | for Models { }027P{ }, { }030P{ }, and { }035P{ }   | GEA40-171 (80095888)       |
|       | for Models { }040P{ }, { }060P{ }, and { }080P{ }   | GEA40-172 (80095409)       |
| **14  | Extended Boot   |                            |
| +     | for Model { }005P{ }  | VA1-R18-170 (47526045)     |
| +     | for Models { }010P{ } and { }015P{ }  | VA1-R25-170 (47526046)     |
|       | for Models { }018P{ } and { }020P{ }  | GAA2-170 (80199557)        |
|       | for Models { }027P{ }, { }030P{ }, and { }035P{ }   | GAAA-170 (80199052)        |
|       | for Models { }040P{ }, { }060P{ }, and { }080P{ }   | GAA5-170 (80199656)        |
| **15  | Spanner Wrench  |                            |
|       | for Tool Series { }2A{ }  | CPS2-478 (45611563)        |
|       | for Tool Series { }5A{ }  | GEA40-478 (80114440)       |
| **16  | Dowel Pin   |                            |
|       | for Spanner Wrench CPS2-478   | CPS2-478L (45611639)       |
|       | for Spanner Wrench GEA40-478  | GEA40-478S (80114689)      |
| *17   | Clamp Fixture (for Models { }005P{ }, { }010P{ }, { }015P{ }, and { }018P{ })                     | CPS2-K48 (45626546)        |
| **^18 | Reaction Bar Assembly   | DEA120-K48 (04642369)      |
| **^19 | Mounting Plate Assembly   | DAM120-K48 (04340535)      |
| **^21 | Mounting Plate Assembly (flanged)   | GEM120-K48 (80112790)      |
| †     | Socket Tray Retaining Pin & Spring (for 3/8" and 1/2" Square Drive)                               | KIT-PFS (45567997)         |
| †     | Socket Tray Retaining Pin & Spring (for 3/8" Square Drive only, Quantity: 5 of each)              | GEA15-38KIT-5 (45612033)   |
| †     | Socket Tray Retaining Pin & Spring (for 1/2" Square Drive only, Quantity: 5 of each)              | GEA40-38KIT-5 (45612041)   |

\* QX Pistol Tool Series { }2P{ } accessory only.

\*\* QX Angle Tool Series { }2A{ } and { }5A{ } accessories only.

^ For QX { }5A{ } Series and QX { }27P{ } models using coupling nut DAA4-27.

+ For these models, extended boot may be trimmed to fit standard angle heads.

# Additional colors available upon request. Refer all communication to the nearest **Ingersoll Rand** office or distributor.

† Indicates not illustrated.

**Parts and Maintenance**

Use lithium-based, electrical contact grease with no particles for all electrical connections.

When tool life has expired, it is recommended that the tool be disassembled, degreased and parts separated by material for proper recycling.

Tool repair and maintenance should only be carried out by an Authorized Service Center.

Refer all communications to the nearest **Ingersoll Rand** office or distributor.

**Related Documentation**

Manuals can be downloaded from [ingersollrand.com](http://ingersollrand.com)

For additional information, refer to:

Product Safety Information Manual TL-VP1T-SIM and TL-VP1T-SIMV

Product Information Manual TL-VP1T-PIM

Maintenance Information Manual TL-VP1T-MIM

CE-Declaration of Conformity TL-VP1T-DOC

UK-Declaration of Conformity TL-VP1T-DOC-UK

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