

RESERVDELSINFORMATION / PARTS INFORMATION

## Parts List: Ingersoll Rand QX Series(TM) Cordless Torque Multiplier

Ingersoll Rand QXXD5PT01KPW16K2 · QXXD5PT01KPW16

### Originaldokument: Ingersoll Rand

Tillhandahålls av Professional Technologies Sweden AB

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**Produkt / Product: skanna QR-koden · scan QR**



### Service · Kalibrering · Originalreservdelar

Service · Calibration · Genuine spare parts



TL-VP2T-PLM  
Edition 3  
November 2023

# Precision Torque Multiplier

## QX Connect Multiplier Series

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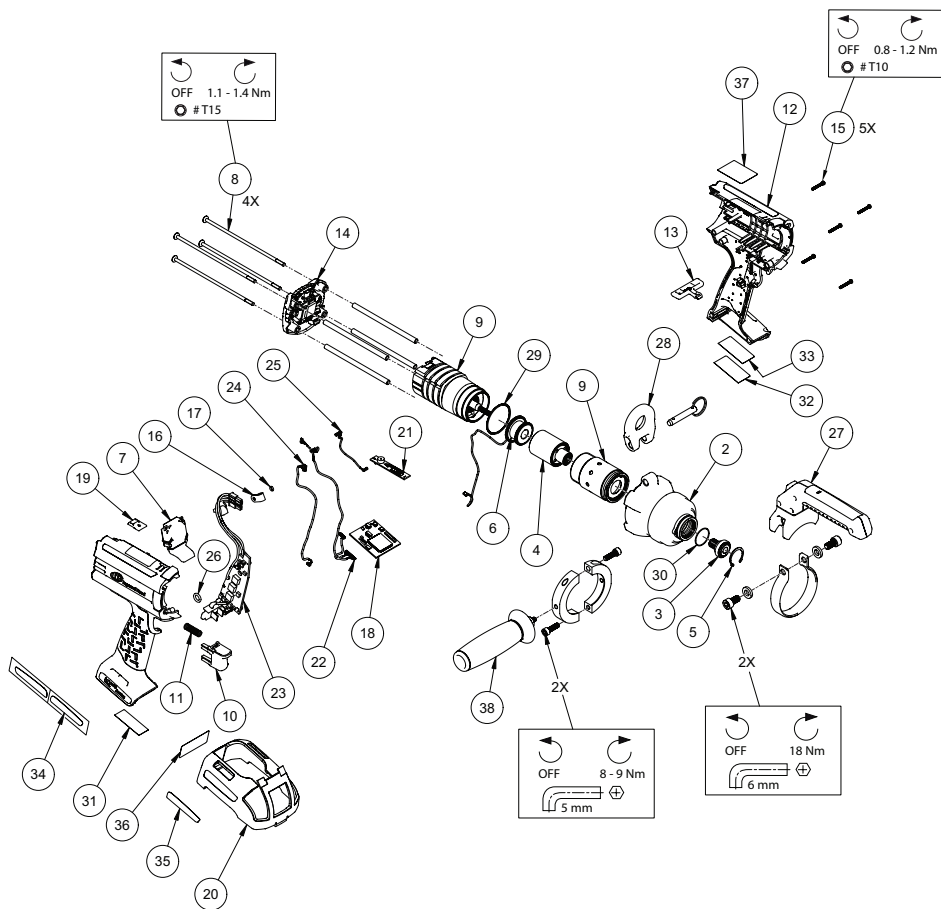
# Parts Information



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## QX{ }5P{ } Housing Assembly - Exploded View

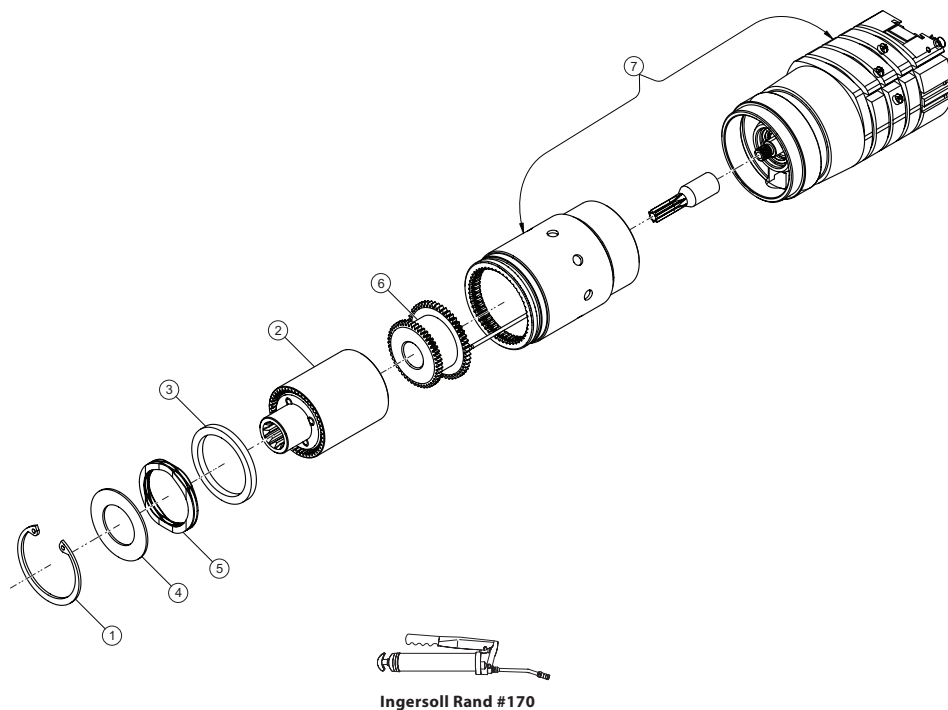


Use lithium-based, electrical contact grease with no particles for all electrical connections.

## QX{ }5P{ } Housing Assembly - Parts List

| Item | Part Description                      | Part Number (CCN)       |
|------|---------------------------------------|-------------------------|
| 2    | Case                                  | VP2-40                  |
| 3    | Adapter Assembly                      | VP2-212A                |
| 4    | Gear Pack Assembly                    | GEA40-A8-18 (22038186)  |
| 5    | Retaining Ring                        | VP2-518                 |
| 6    | Transducer Assembly                   | VP2-A756                |
| 7    | Fan Assembly                          | TA-VP2-258              |
| 8    | Screw, Housing Long                   | VP2-25                  |
| 9    | Drive Module                          | VP2-A53                 |
| 10   | Trigger Assembly                      | VP2-A93                 |
| 11   | Spring                                | VP1-726 (47088356)      |
| 12   | Handle Assembly                       | VP2-A59                 |
| 13   | Switch, F/R Assembly                  | VP2-A75                 |
| 14   | Back Cap Assembly                     | TA-VP2T-888-2DD         |
| 15   | Screw                                 | VP1-105 (47111778)      |
| 16   | Cable Clamp                           | VP2-100                 |
| 17   | O-Ring                                | VP2-100-2               |
| 18   | Motor Controller Board, 40V           | TA-VA2T-499-1           |
| 19   | USB Cover                             | VP2-441                 |
| 20   | Retainer, Battery                     | VP1-202V (47506474001)  |
| 21   | Trigger Board Assembly, 40V Pistol    | TA-VP2-499-5            |
| 22   | Cable, Internal Interface             | VP2-CABLE-1             |
| 23   | Power Board Assembly, 40V Pistol      | TA-VP2T-499-3           |
| 24   | Cable, Motor Hall                     | VP2-CABLE-2             |
| 25   | Cable, Trigger Harness                | VP2-CABLE-3             |
| 26   | O-Ring, Pcb                           | VP1-282 (47104211)      |
| 27   | Auxiliary Handle Assembly             | VP2-AAUX-T              |
| 28   | Tethering Hook Assembly               | VP2-377A                |
| 29   | O-Ring                                | Y327-30 (81393142)      |
| 30   | O-Ring                                | VP2-137                 |
| 31   | Label, Certification                  | TL-VP1T-300             |
| 32   | Label, Information, All Transparent   | TL-VP1-486AT            |
| 33   | Label, Information                    | TL-VP1T-486             |
| 34   | Foot Label                            | TL-VP2-099-3V           |
| 35   | Retainer Foot Label, C1D2 Conspicuity | VP1-99V-2 (47508447001) |
| 36   | Hzrd Locs Warning Label               | VP1-99V (47506214001)   |
| 37   | Warning Labels                        | TL-VP2-099-5PV          |
|      |                                       | TL-VP2-099-5PP          |
| 38   | Auxiliary Handle Assembly             | NSP-A48                 |

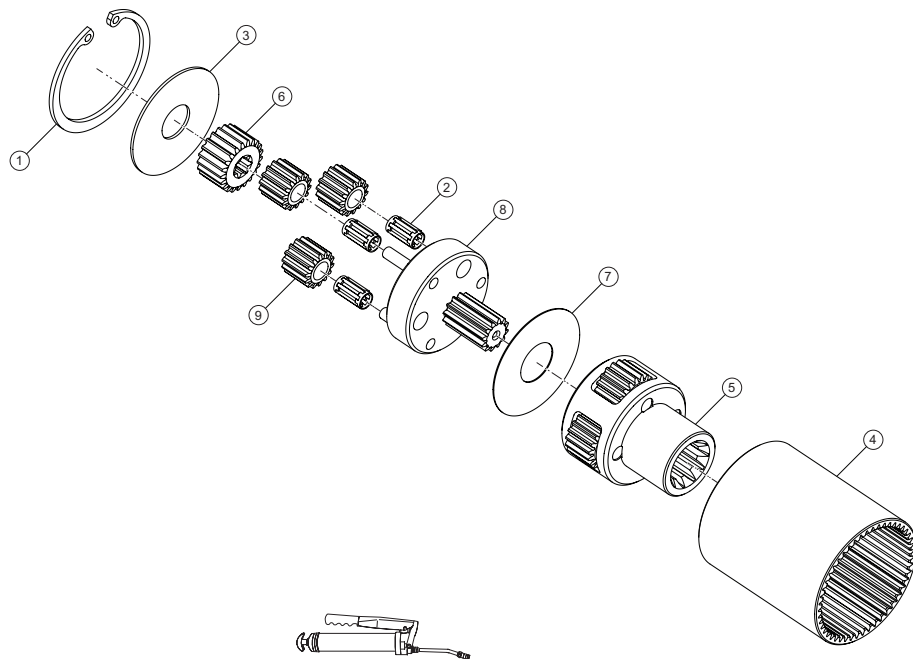
## Drive Module (VP2-A53) - Exploded View



## Drive Module (VP2-A53) - Parts List

| Item | Part Description                           | Part Number (CCN)       |
|------|--------------------------------------------|-------------------------|
| 1    | Retaining Ring                             | W64-118 (03084266)      |
| 2    | Gear Pack Assembly                         | GEA40-17-M37 (22038186) |
| 3    | Seal, Grease                               | GEA40-248 (80106958)    |
| 4    | Washer                                     | VP2-247                 |
| 5    | Wave Spring                                | VP2-250                 |
| 6    | Transducer Assembly                        | VP2-A756                |
| 7    | Kit, Motor, Pinion, and Gear Case Assembly | TK-VP2-A53-7            |

## Gear Pack Assembly (PN GEA40-17-M37) - Exploded View

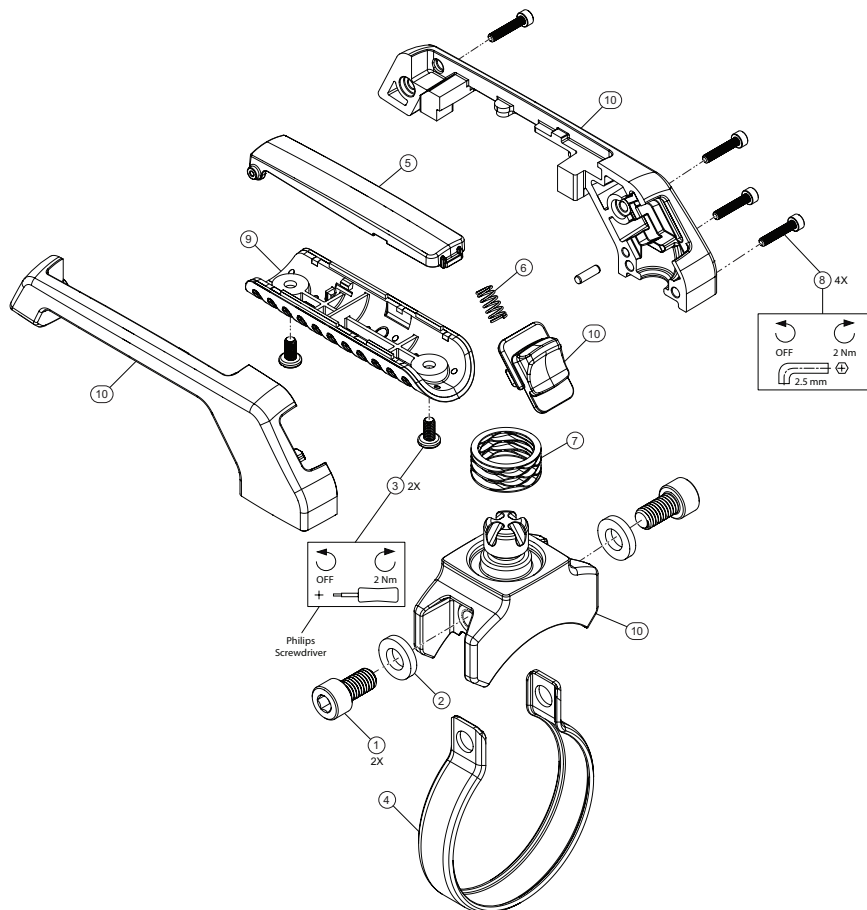


Ingersoll Rand #170

## Gear Pack Assembly (PN GEA40-17-M37) - Parts List

| Item | Part Description        | Part Number (CCN)        |
|------|-------------------------|--------------------------|
| 1    | Internal Retaining Ring | 4E-118 (03079738)        |
| 2    | Brg-Cage Roller         | 6WTM-500 (03800299)      |
| 3    | Spacer                  | GEA40-81 (22036495)      |
| 4    | Ring Gear               | GEA40-406 (22038079)     |
| 5    | Spindle Assembly        | GEA40-A8-18 (22038145)   |
| 6    | Sun Gear                | GEA40-17-21 (22039317)   |
| 7    | Spacer                  | GEA40-80 (22041883)      |
| 8    | Gearhead Assembly       | GEA40-A216-14 (80096050) |
| 9    | Planet Gear             | GEA40-10-14 (80098064)   |

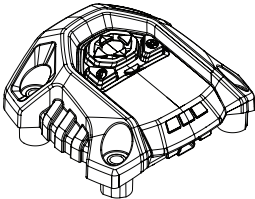
## QX{ }5{ }T{ }M{ } Auxiliary Handle Assembly (VP2-AAUX-T) - Exploded View



## QX{ }5{ }T{ }M{ } Auxiliary Handle Assembly (VP2-AAUX-T) - Parts List

| Item | Part Description                 | Part Number (CCN) |
|------|----------------------------------|-------------------|
| 1    | Screw, Auxiliary Band            | VP2-49            |
| 2    | Washer, Auxiliary Band           | VP2-49-2          |
| 3    | Screw, Auxiliary Tray            | VP2-78            |
| 4    | Auxiliary Band                   | VP2-364           |
| 5    | Single Trigger, Auxiliary Handle | VP2-400-T         |
| 6    | Spring, Auxiliary Handle         | VP2-405           |
| 7    | Wave Spring                      | VP2-405-2         |
| 8    | Screw, Auxiliary Handle          | VP2-667           |
| 9    | Tray, Auxiliary Handle           | VP2-981           |
| 10   | Auxiliary Handle Assembly        | VP2-A48           |

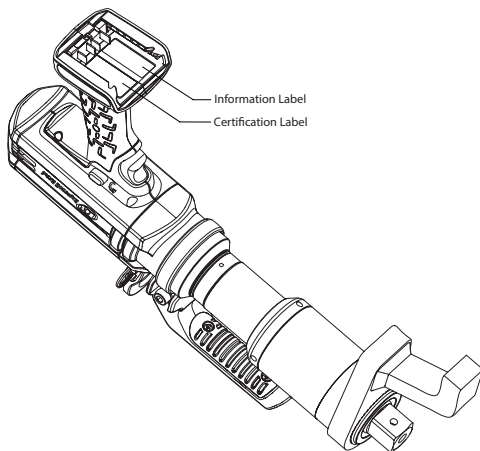
| Back Cap Assembly - 40V Multiplier Tool |                |
|-----------------------------------------|----------------|
| Part Number (CCN)                       | Model Type     |
| QXXD5PT000P000                          | QXXD5PT{ }P{ } |
| QXBD5PT000P000                          | QXBD5PT{ }P{ } |
| QXFD5PT000P000                          | QXFD5PT{ }P{ } |



## Suggested Tools

| Tool Used                 | Part Description                  | Where Used?                 |
|---------------------------|-----------------------------------|-----------------------------|
| Torque Screwdriver        | 2 Nm capacity                     | Housing and Back Cap Screws |
| T10 Torx Bit              | ---                               | Housing Screws              |
| T15 Torx Bit              |                                   | Back Cap Screws             |
| Allen Wrench              | 6 mm                              | Auxiliary Band              |
|                           | 2.5 mm                            | Auxiliary Handle            |
| Phillips Head Screwdriver | ---                               | Auxiliary Tray              |
| Internal Snap Ring Pliers |                                   | General Use                 |
| Pick                      |                                   | O-Rings, Wires, etc.        |
| Torque Wrench             | 1/2" Sq. Drive, 50 ft-lb capacity | General Use                 |

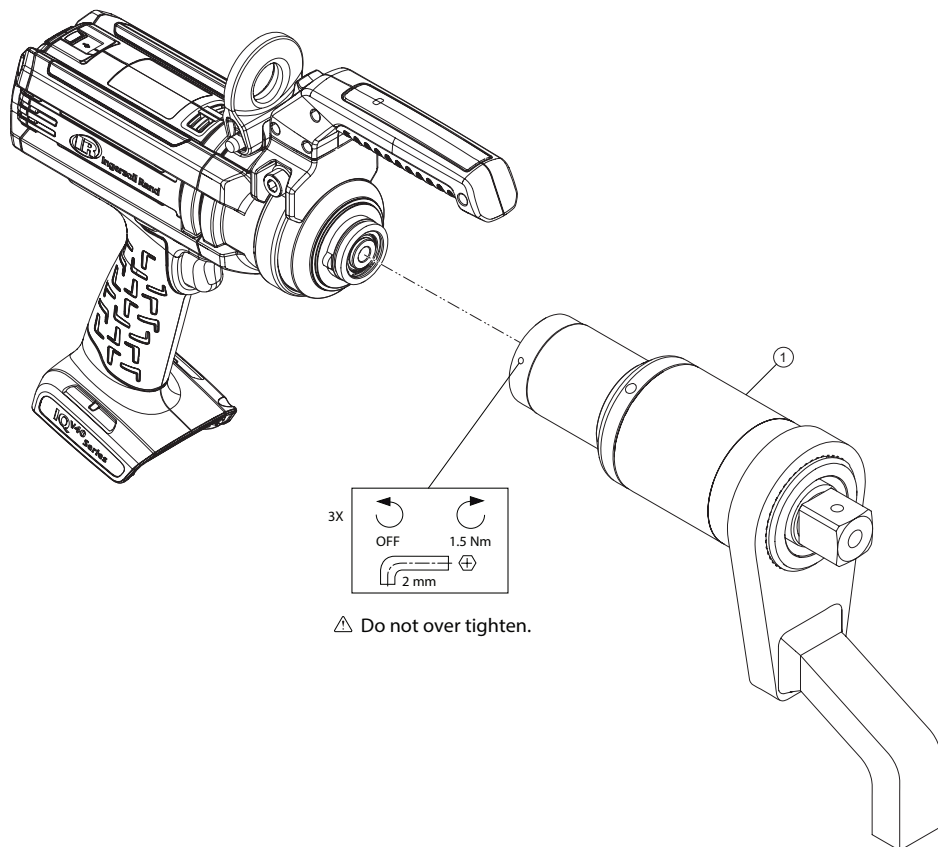
## Tool Assembly



**QX{ }5P**

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

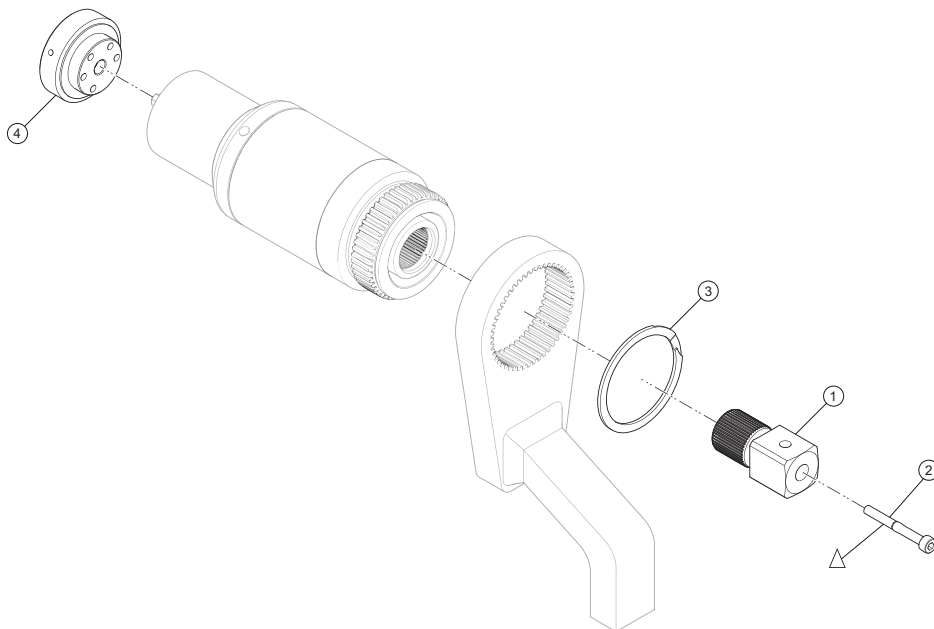
## Norbar Gearbox Assemblies



## Norbar Gearbox Assemblies - Parts List

| Item | Part Description                                     | Part Number (CCN)  |
|------|------------------------------------------------------|--------------------|
| 1    | Gearbox Assembly, 200 Nm W Reaction Arm              | NSP-A750-200A      |
|      | Gearbox Assembly, 500 Nm W Reaction Arm              | NSP-A750-500A      |
|      | Gearbox Assembly, 1000 Nm W Reaction Arm             | NSP-A750-1000A     |
|      | Gearbox Assembly, 1350 Nm W Reaction Arm             | NSP-A750-1350A     |
|      | Gearbox Assembly, 2000 Nm W Reaction Arm             | NSP-A750-2000A     |
|      | Gearbox Assembly, 2700 Nm W Reaction Arm             | NSP-A750-2700A     |
|      | Gearbox Assembly, 4000 Nm W Reaction Arm             | NSP-A750-4000A     |
|      | Gearbox Assembly, 6000 Nm W Reaction Arm             | NSP-A750-6000A     |
|      | Gearbox Reaction Arm Assembly, 1000 Nm Wheel, 1" Sq. | TA-VP2-750-01K-W16 |

## Norbar Gearbox Assembly - Exploded View



## Norbar Gearbox Assembly - Parts List

| Item | Part Description             | NSP-A750-200A | NSP-A750-500A | NSP-A750-1000A | NSP-A750-1350A | NSP-A750-01K-16  |
|------|------------------------------|---------------|---------------|----------------|----------------|------------------|
| 1    | Square Drive                 | NSP-299-52S12 | NSP-299-52S12 | NSP-299-72S12  | NSP-299-72S16  | TK-NSP-299-72S16 |
| 2    | Square Drive Retaining Screw | NSP-299-M4X30 | NSP-299-M4X30 | NSP-299-M5X45  | NSP-299-M5X45  |                  |
| 3    | Circlip                      | NSP-299-CLP72 | NSP-299-CLP72 | NSP-299-CLP72  | NSP-299-CLP72  | NSP-299-CLP72    |
| 4    | IR Pistol Adapter Kit        | NSP-766-W2222 | NSP-766-W2222 | NSP-766-W2222  | NSP-766-W2222  | NSP-766-W2222    |

| Item | Part Description             | NSP-A750-2000A | NSP-A750-2700A | NSP-A750-4000A | NSP-A750-6000A |
|------|------------------------------|----------------|----------------|----------------|----------------|
| 1    | Square Drive                 | NSP-299-72S16  | NSP-299-80S16  | NSP-299-92S16  | NSP-299-119S24 |
| 2    | Square Drive Retaining Screw | NSP-299-M5X45  | NSP-299-M5X40  | NSP-299-M5X60  | NSP-299-M5X80  |
| 3    | Circlip                      | NSP-299-CLP72  | NSP-299-CLP72  | NSP-299-CLP72  | NSP-299-CLP72  |
| 4    | IR Pistol Adapter Kit        | NSP-766-W2222  | NSP-766-W2222  | NSP-766-W2222  | NSP-766-W2222  |

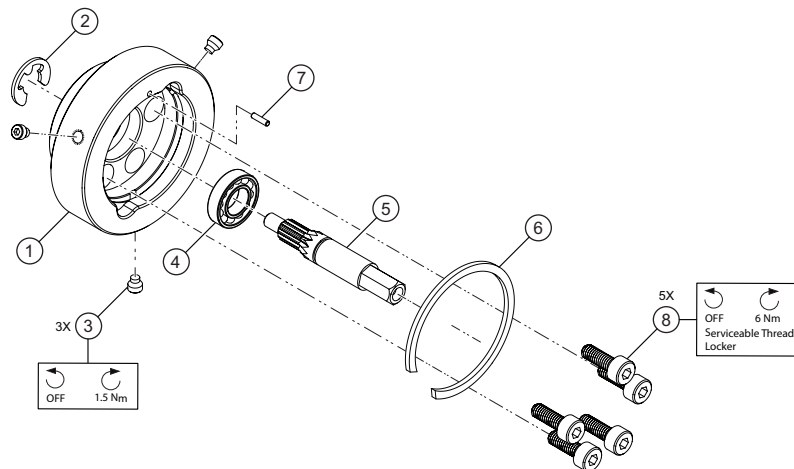
## Square Drive Retaining Screw Torque Spec Δ

| Norbar Gearbox Torque: | Torque: |
|------------------------|---------|
| 200 Nm                 | 6 Nm    |
| 500 Nm                 |         |
| 1000 Nm                | 12 Nm   |
| 1350 Nm                |         |
| 2000 Nm                |         |
| 2700 Nm                |         |
| 4000 Nm                |         |
| 6000 Nm                |         |

|                    |                                                                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1000 Nm Truck Lane | <b>For 1000 Nm, 1" Square Wheel Applications:</b><br>Apply Blue Thread Locker to Square Drive Retaining Screw. Tighten to 1 Nm and then loosen 180 degree to Set Screw position. |
|                    | Allow 12 hours cure time minimum.<br><br>Note: Minimum Square Drive gap shall be 0.4 mm.                                                                                         |

Note: Apply Serviceable Thread Locker to Retaining Screw (Item 2).

## Norbar Adapter Assembly Kit (NSP-766-W2222) - Exploded View



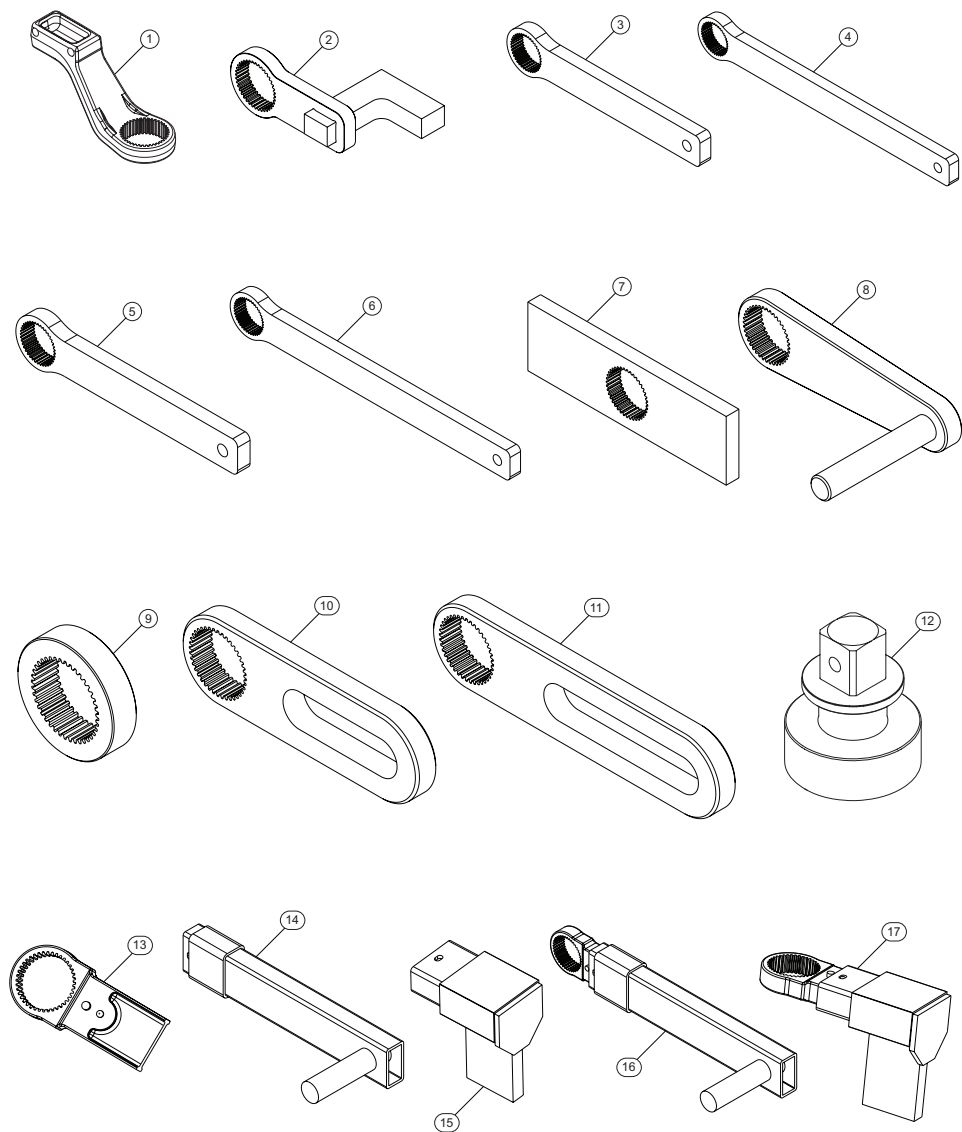
## Norbar Adapter Assembly Kit (NSP-766-W2222) - Parts List

| Item | Part Description                                          | Part Number (CCN) |
|------|-----------------------------------------------------------|-------------------|
| 1    | Adapter, Norbar (IR PN NSP-212)                           | 19339             |
| 2    | Snap Ring                                                 | 26491             |
| 3    | Set Screw (1.5 Nm at Assembly to Power Unit) (3 required) | 253965.4          |
| 4    | Ball Bearing                                              | 27308             |
| 5    | Drive Shaft, Hex                                          | 19143             |
| 6    | Retaining Ring                                            | 265150            |
| 7    | Press Pin                                                 | 27125             |
| 8    | M4 SHCS (Serviceable Thread Locker + 6 Nm) (5 required)   | 25351.12          |

## Suggested Tools

| Tool Used              | Part Description | Where Used?                                          |
|------------------------|------------------|------------------------------------------------------|
| Allen Wrench           | 2 mm             | Norbar Gearbox Assembly onto IR Power Unit           |
|                        | 2.5 mm           | IR to Norbar Adapter Assembly                        |
|                        | 3 mm             | Norbar Square Drive<br>(200 Nm and 500 Nm Gearboxes) |
|                        | 4 mm             | Norbar Square Drive<br>(1000 Nm - 6000 Nm Gearboxes) |
| Flat Head Screw Driver | ---              | Norbar Reaction Bar                                  |

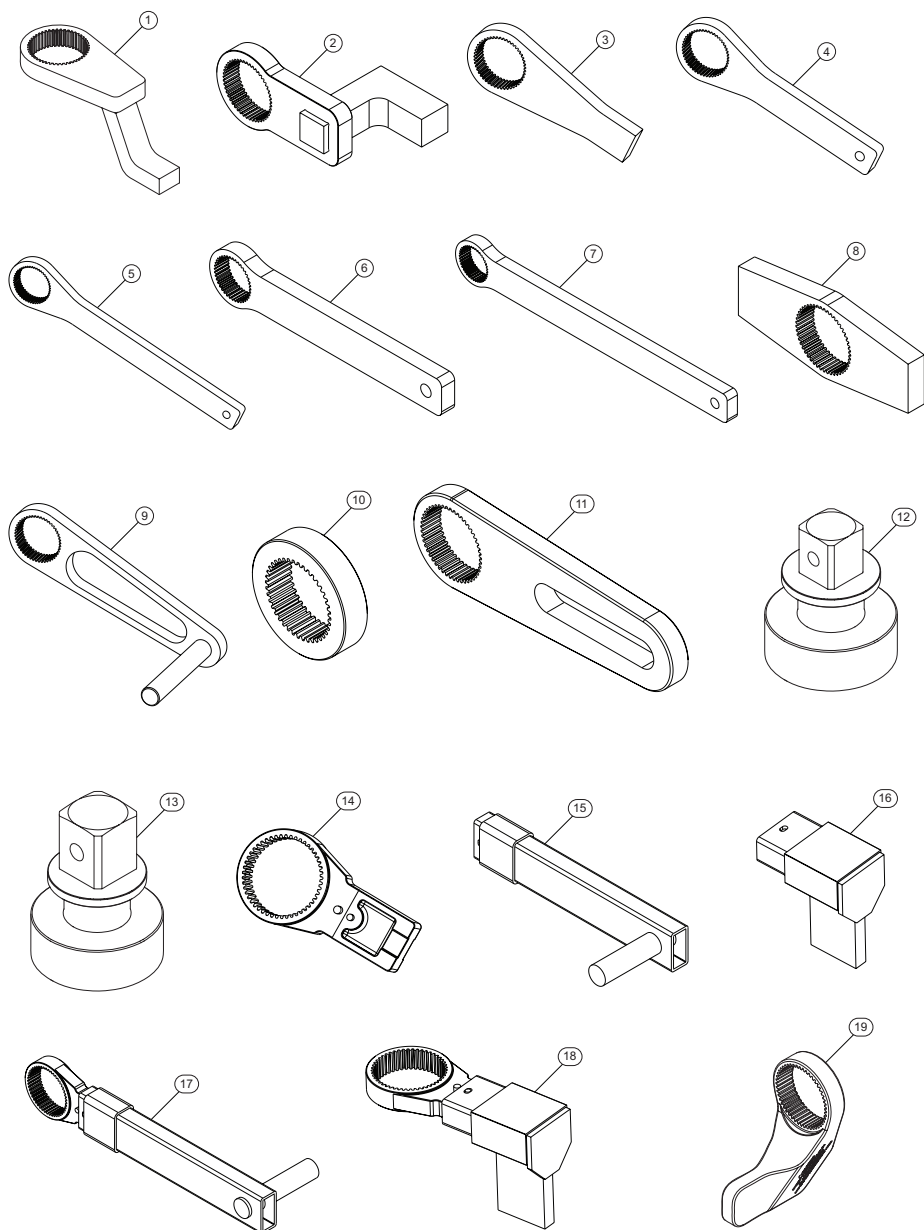
## Reaction Options - NSP-A750-200A and NSP-A750-500A



## Reaction Options - NSP-A750-200A and NSP-A750-500A - Parts List

| Item | Part Description                                                                   | Part Number (CCN) |
|------|------------------------------------------------------------------------------------|-------------------|
| 1    | Cranked Reaction Arm (Standard) - 52 mm, Steel                                     | NSP-766-52CR      |
| 2    | Cranked Reaction Bar, 52 mm, Steel, 90 degree                                      | NSP-766-52CR90    |
| 3    | Reaction Arm, 52 mm, Straight, Steel, 10.0"                                        | NSP-766-52ST      |
| 4    | Reaction Arm, 52 mm, Straight, Steel, 15.5"                                        | NSP-766-52STS155  |
| 5    | Reaction Arm, 52 mm, Straight, Aluminum, 10.0"                                     | NSP-766-52STA100  |
| 6    | Reaction Arm, 52 mm, Straight, Aluminum, 15.5"                                     | NSP-766-52STA155  |
| 7    | Reaction Arm, 52 mm, Double Sided, Straight, Steel, 9.84"                          | NSP-766-52STD098  |
| 8    | Reaction Arm, 52 mm, Plate and Peg, Steel, 6.0"                                    | NSP-766-52PPS060  |
| 9    | Weld Ring, 52 mm                                                                   | NSP-766-52WR      |
| 10   | Plate, Sliding Reaction, 52 mm, Steel, 5"                                          | NSP-766-52SLS050  |
| 11   | Reaction Arm, 52 mm, Sliding Plate for Sliding Slave Square, Straight, Steel, 7.0" | NSP-766-52SL      |
| 12   | Slave Square Kit for Sliding Reaction Arm, 200 Nm and 500 Nm (3/4" Sq.)            | NSP-766-52SLK12   |
| 13   | Reaction Arm, 52 mm, Yoke                                                          | NSP-766-52Y       |
| 14   | Reaction Arm 52/72 mm, Yoke Tube and Peg, Steel                                    | NSP-766-52-72YTP  |
| 15   | Reaction Arm 52/72 mm, Yoke Tube and Paddle, Steel                                 | NSP-766-52-72YP   |
| 16   | Reaction Adapter 52 mm, Yoke & Tube Assembly, 11.7"                                | NSP-766-52YTA     |
| 17   | Reaction Adapter 52 mm, Yoke & Paddle Assembly                                     | NSP-766-52YPA     |

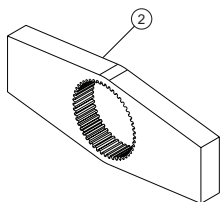
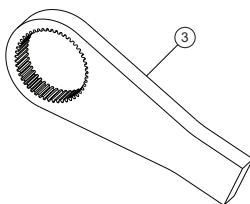
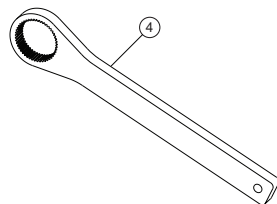
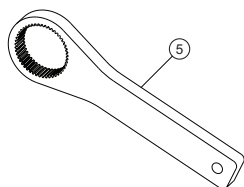
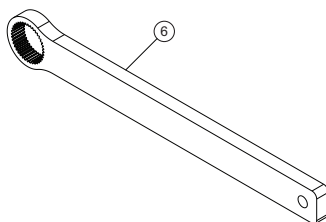
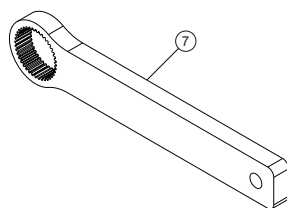
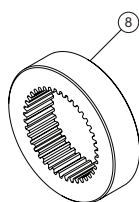
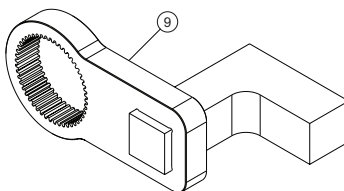
Reaction Options - NSP-A750-1000A, NSP-A750-1350A, and NSP-A750-2000A



## Reaction Options - NSP-A750-1000A, NSP-A750-1350A, and NSP-A750-2000A - Parts List

| Item | Part Description                                                                    | Part Number (CCN) |
|------|-------------------------------------------------------------------------------------|-------------------|
| 1    | Cranked Reaction Arm (Standard) - 72 mm, Steel                                      | NSP-766-72CR      |
| 2    | Cranked Reaction Bar, 72 mm, Steel, 90 degree                                       | NSP-766-72CR90    |
| 3    | Reaction Arm, 72 mm, Straight, Steel, 6.97"                                         | NSP-766-72STS070  |
| 4    | Reaction Arm, 72 mm, Straight, Steel, 10.0"                                         | NSP-766-72ST      |
| 5    | Reaction Arm, 72 mm, Straight, Steel, 15.5"                                         | NSP-766-72STS155  |
| 6    | Reaction Arm, 52 mm, Straight, Aluminum, 10.0"                                      | NSP-766-52STA100  |
| 7    | Reaction Arm, 52 mm, Straight, Aluminum, 15.5"                                      | NSP-766-52STA155  |
| 8    | Reaction Arm, 72 mm, Double Sided, Straight, Steel, 7.87"                           | NSP-766-72STD079  |
| 9    | Reaction Arm, 72 mm, Plate and Peg, 10"                                             | NSP-766-72PP100   |
| 10   | Weld Ring, 72 mm                                                                    | NSP-766-72WR      |
| 11   | Reaction Arm, 72 mm, Sliding Plate for Sliding Slave Square, Straight, Steel, 8.0"  | NSP-766-72SL      |
| 12   | Slave Square Kit for Sliding Reaction Arm, 1000 Nm, 1350 Nm, and 2000 Nm (3/4" Sq.) | NSP-766-72SLK12   |
| 13   | Slave Square Kit for Sliding Reaction Arm, 1000 Nm, 1350 Nm, and 2000 Nm (1" Sq.)   | NSP-766-72SLK16   |
| 14   | Reaction Arm, 72 mm, Yoke                                                           | NSP-766-72Y       |
| 15   | Reaction Arm 52/72 mm, Yoke Tube and Peg, Steel                                     | NSP-766-52-72YTP  |
| 16   | Reaction Arm 52/72 mm, Yoke Tube and Paddle, Steel                                  | NSP-766-52-72YP   |
| 17   | Reaction Adapter 72 mm, Yoke & Tube Assembly, 11.7"                                 | NSP-766-72YTA     |
| 18   | Reaction Adapter 72 mm, Yoke & Paddle Assembly                                      | NSP-766-72YPA     |
| 19   | Reaction Arm, Short                                                                 | TP-NSP-766-72WS   |

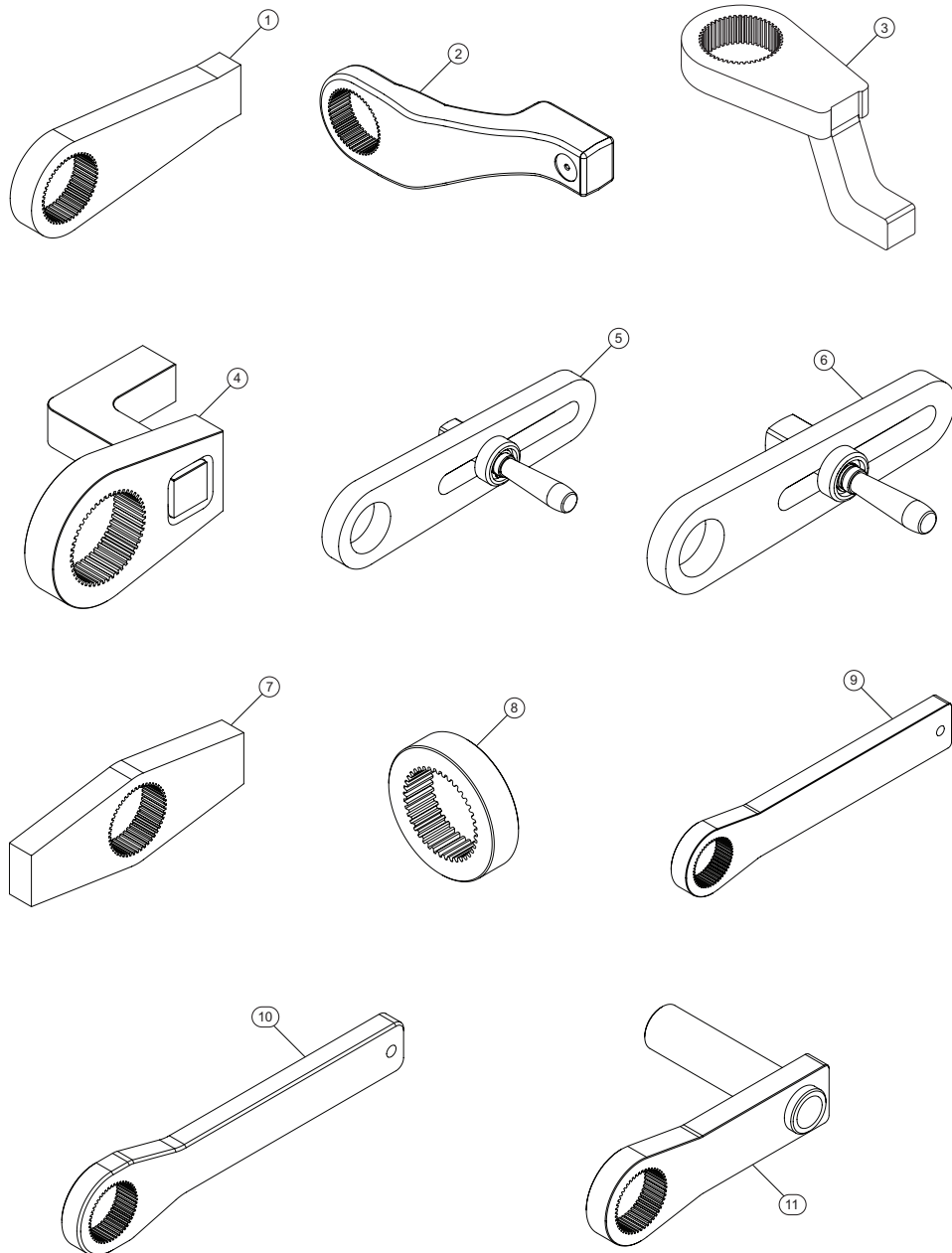
## Reaction Options - NSP-A750-2700A



## Reaction Options - NSP-A750-2700A - Parts List

| Item | Part Description                                          | Part Number (CCN) |
|------|-----------------------------------------------------------|-------------------|
| 1    | Used with 19290 Series: 72 mm Reaction Tube               | ---               |
| 2    | Reaction Arm, 72 mm, Double Sided, Straight, Steel, 7.87" | NSP-766-72STS079  |
| 3    | Reaction Arm, 72 mm, Straight, Steel, 6.97"               | NSP-766-72STS070  |
| 4    | Reaction Arm, 72 mm, Straight, Steel, 15.5"               | NSP-766-72STS155  |
| 5    | Reaction Arm, 72 mm, Straight, Steel, 10.0"               | NSP-766-72ST      |
| 6    | Reaction Arm, 52 mm, Straight, Aluminum, 15.5"            | NSP-766-52STA155  |
| 7    | Reaction Arm, 52 mm, Straight, Aluminum, 10.0"            | NSP-766-52STA100  |
| 8    | Weld Ring, 72 mm                                          | NSP-766-72WR      |
| 9    | Cranked Reaction Bar, 72 mm, Steel, 90 degree             | NSP-766-72CR90    |

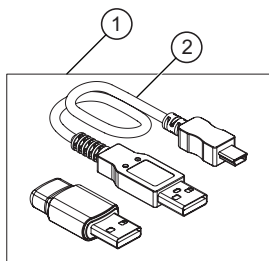
# Reaction Options - NSP-A750-4000A and NSP-A750-6000A



## Reaction Options - NSP-A750-4000A and NSP-A750-6000A - Parts List

| Item | Part Description                                                            | Part Number (CCN) |
|------|-----------------------------------------------------------------------------|-------------------|
| 1    | Reaction Arm, 92 mm, Straight, Steel, 7.87"                                 | NSP-766-92STS079  |
| 2    | Cranked Reaction Arm, 92 mm, Aluminum                                       | NSP-766-92CRA     |
| 3    | Cranked Reaction Arm (Standard), 92 mm, Steel                               | NSP-766-92CR      |
| 4    | Cranked Reaction Bar, Mid Section, 92 mm, Steel, 90 degree, 3.94"           | NSP-766-92CR90039 |
| 5    | Reaction Arm, 92 mm, Sliding Reaction Assembly, Straight, Steel, 1" Sq.     | NSP-766-92SL08    |
| 6    | Reaction Arm, 92 mm, Sliding Reaction Assembly, Straight, Steel, 1-1/2" Sq. | NSP-766-92SL12    |
| 7    | Reaction Arm, 92 mm, Double Sided, Straight, Steel, 9.45"                   | NSP-766-92STS095  |
| 8    | Weld Ring, 92 mm                                                            | NSP-766-92WR      |
| 9    | Reaction Arm, 92 mm, Straight, Steel, 15.5"                                 | NSP-766-92STS155  |
| 10   | Reaction Arm, 92 mm, Straight, Aluminum, 15.5"                              | NSP-766-92STA155  |
| 11   | Reaction Arm, 92 mm, Plate and Peg, 8"                                      | NSP-766-92PP080   |

## 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) |

## 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-VP2T-SIM, TL-VP1T-SIM, and TL-VP1T-SIMV

Product Information Manual TL-VP2T-PIM

Maintenance Information Manual TL-VP2T-MIM

