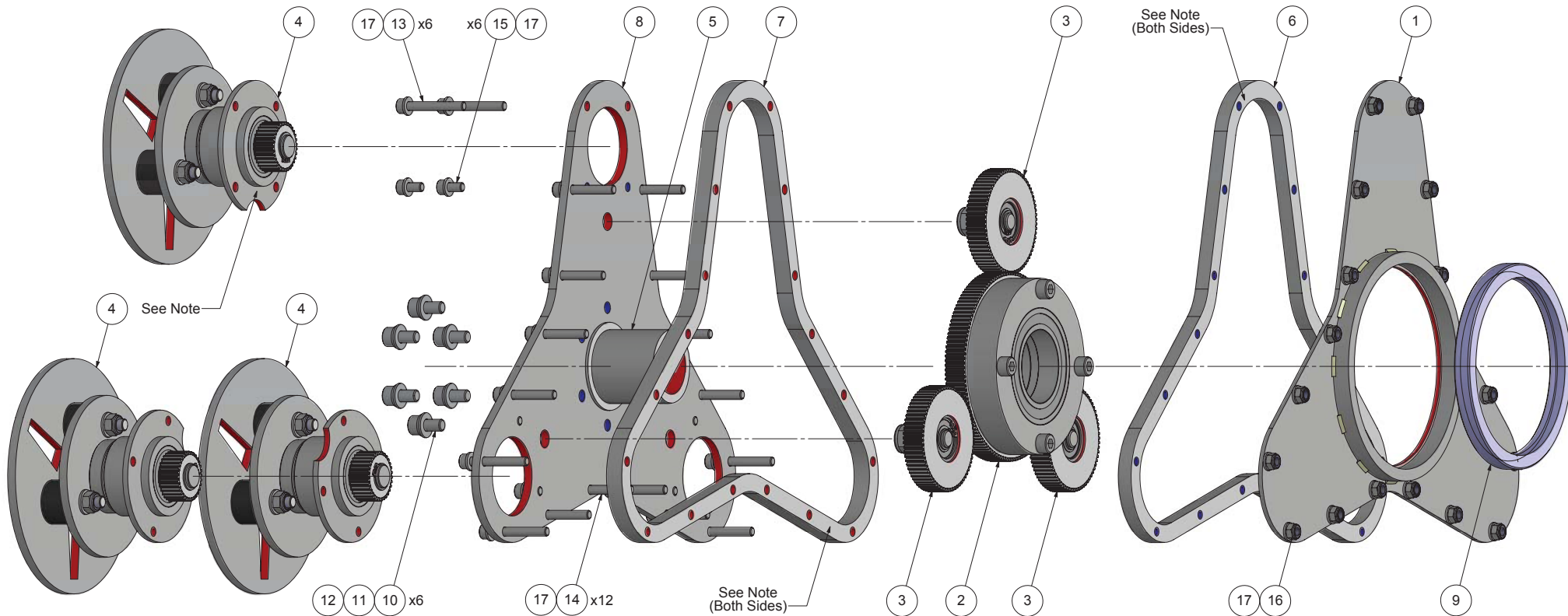


DFG460-5
Diamond Floor Grinder
Operating Manual

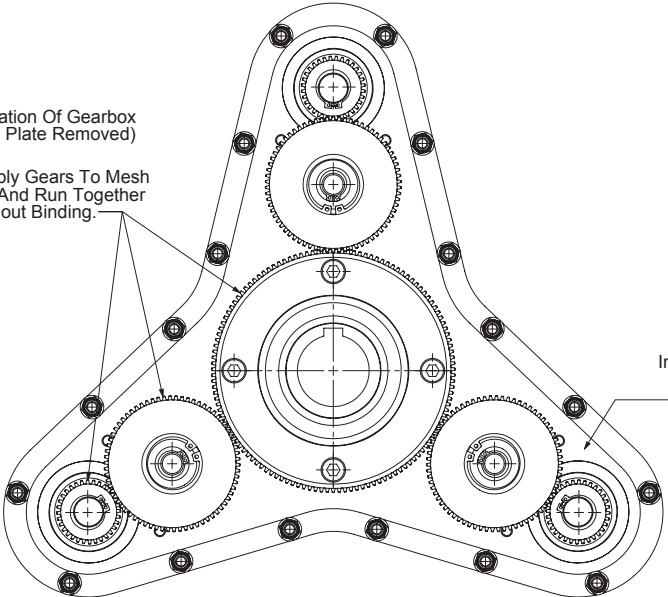




Note: Seal Gearbox On Assembly With Gastite Multi Purpose Silicone Sealant (Clear)

Plan Elevation Of Gearbox
(With Top Plate Removed)

On Assembly Gears To Mesh
Smoothly And Run Together
Without Binding.



Important: Fill With 200g
Of EPOO Lithium
Grease On Assembly

Remove Sharp Edges & Corners
All Machined Surfaces To Be Square & Parallel

ALL DIMENSIONS
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OTHERWISE STATED

GENERAL TOLERANCE
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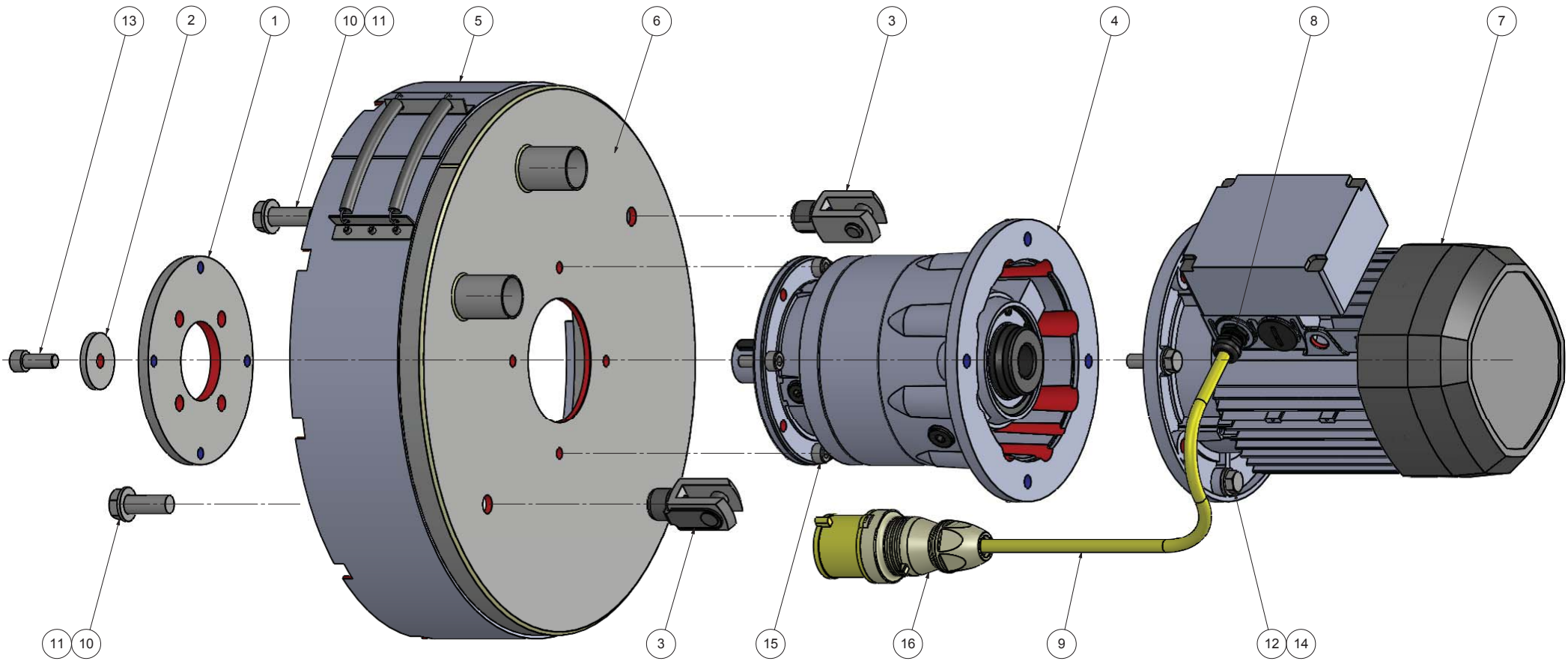
| REVISIONS | | | | |
|--|-----------------|------------|----------|------------|
| REV | DESCRIPTION | DATE | APPROVED | QTY |
| 1 | INITIAL RELEASE | 20/10/2013 | BJ | - |
| TITLE DFG-460 Main Gearbox Assembly | | | | |
| FINISH | | MATERIAL | DRAWN BY | GDC |
| - | | - | SCALE | 1:2 |
| | | | DATE | 16/10/2013 |
| DRAWING No. | | | | A2 |
| DFG-460-0004-1 | | | | |



DFG460-5
Operating Manual

MAIN GEARBOX ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|--------------------------------|--------------------------|
| 1 | 1 | 5504 | Upper Gear Plate |
| 2 | - | See drawing no. DFG-460-0066-1 | Page 18-19 |
| 3 | - | See drawing no. DFG-460-0067-1 | Page 20-21 |
| 4 | - | See drawing no. DFG-460-0068-1 | Page 22-23 |
| 5 | 1 | 5525 | Main Hub |
| 6 | 1 | 5505 | Upper Gear Ring |
| 7 | 1 | 5506 | Lower Gear Ring |
| 8 | 1 | 5507 | Lower Gear Plate |
| 9 | 1 | 7424 | Lip Seal |
| 10 | 6 | BOLT246 | M8 x 16 Cap HD Skt Screw |
| 11 | 6 | WASHER004 | M8 Flat Washer |
| 12 | 6 | WASHER024 | M8 Spring Washer |
| 13 | 6 | BOLT226 | M6 x 45 Cap HD Skt Screw |
| 14 | 12 | BOLT225 | M6 x 40 Cap HD Skt Screw |
| 15 | 6 | BOLT224 | M6 x 12 Cap HD Skt Screw |
| 16 | 18 | NUT043 | M6 Nyloc Nut |
| 17 | 24 | WASHER003 | M6 Flat Washer |



Note: All Fasteners To Be Secured With Locktite 243 On Assembly

| REVISIONS | | | |
|-----------|----------------|------------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| 1 | VOLTAGE UPDATE | 25/07/2014 | BJ |

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| | | | |
|--|---------------|--------------------|----------------|
| TITLE: DFG-460 Main Dive Assembly 110V Single Speed | | QTY - | |
| FINISH - | MATERIAL - | DRAWN BY GDC | SCALE 1:2.5 |
| DATE 07/10/2013 | | DATE 07/10/2013 | |

| | |
|-------------------------------|----|
| DRAWING No. DFG-460-0092-1 | A2 |
|-------------------------------|----|



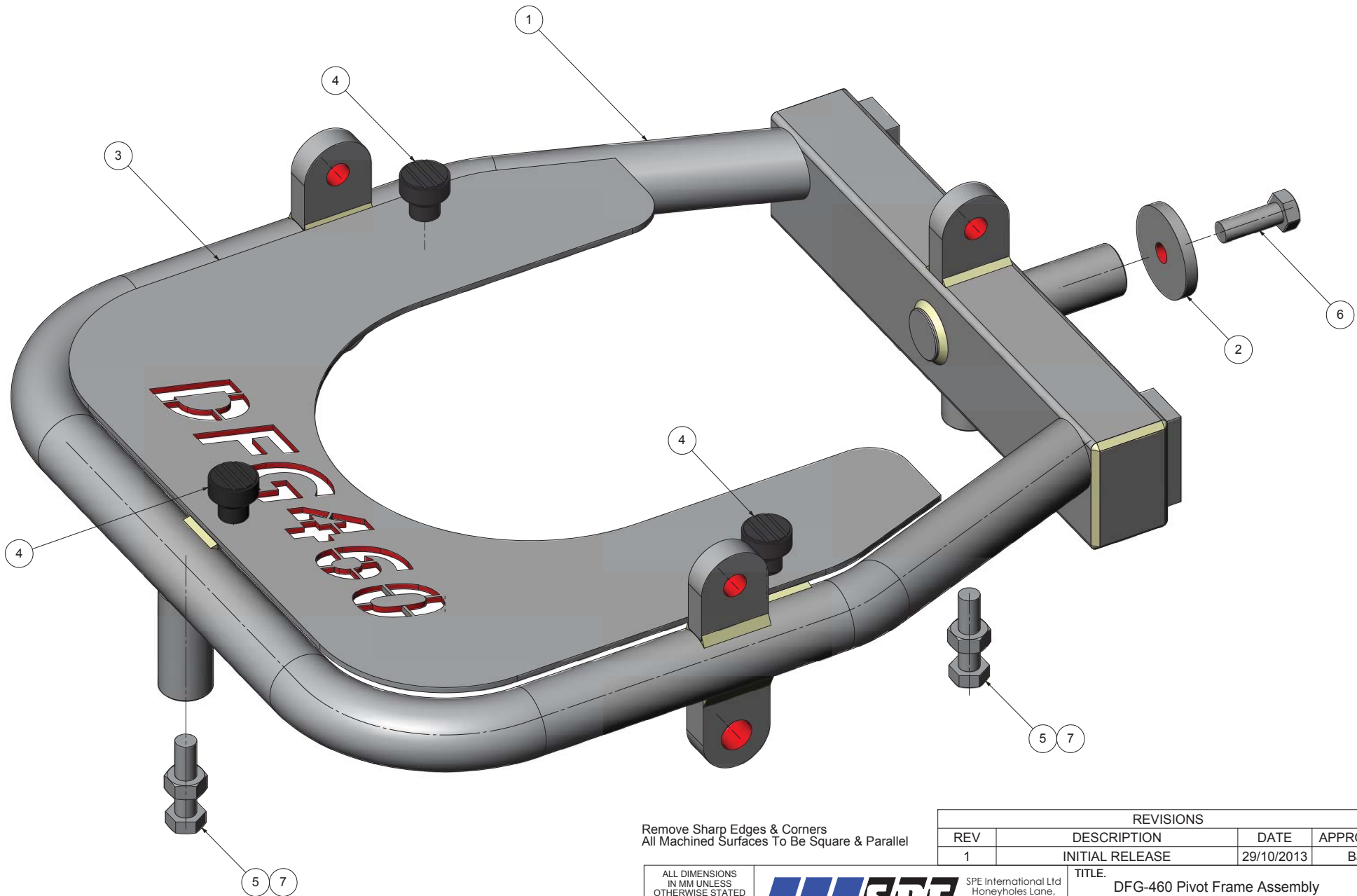
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| |
|-------------------------------------|
| DFG460-5 Operating Manual |
|-------------------------------------|

MAIN DRIVE ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|--|
| 1 | 1 | 5520 | Gearbox Retaining Plate |
| 2 | 1 | 5539 | Gearbox Lock Washer |
| 3 | 2 | 5513 | Yoke & Clevis Pin |
| 4 | 1 | 5511 | Gearbox |
| 5 | 1 | 7017 | Electric Motor |
| 6 | 1 | 5512 | Dust Skirt |
| | 2 | 7331 | Dust Skirt Spring |
| 7 | 1 | 5503 | Cowl |
| 8 | 1 | SPCG/LNM20 | Cable Gland |
| 9 | 1 | SP230-404 | 32A 4Pin Trailing Plug |
| 10 | 1 | 7513 | 4.0mm ² Arctic Yellow Cable |
| 11 | 2 | BOLT094 | M16 x 45 Set Screw |
| 12 | 2 | WASHER008 | M16 Flat Washer |
| 13 | 4 | BOLT082 | M12 x 40 Set Screw |
| 14 | 1 | BOLT282 | M12 x 30 Cap HD Skt Screw |
| 15 | 4 | WASHER006 | M12 Flat Washer |
| 16 | 4 | BOLT263 | M10 x 30 Cap HD Skt Screw |



Note: All Fasteners To Be Secured With Locktite 243 On Assembly

Remove Sharp Edges & Corners
All Machined Surfaces To Be Square & Parallel

| REVISIONS | | | |
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| | | | | |
|--|---------------|-----------------|--------------|--------------------|
| TITLE: DFG-460 Pivot Frame Assembly | | | | QTY - |
| FINISH - | MATERIAL - | DRAWN BY GDC | SCALE NTS | DATE 08/10/2013 |

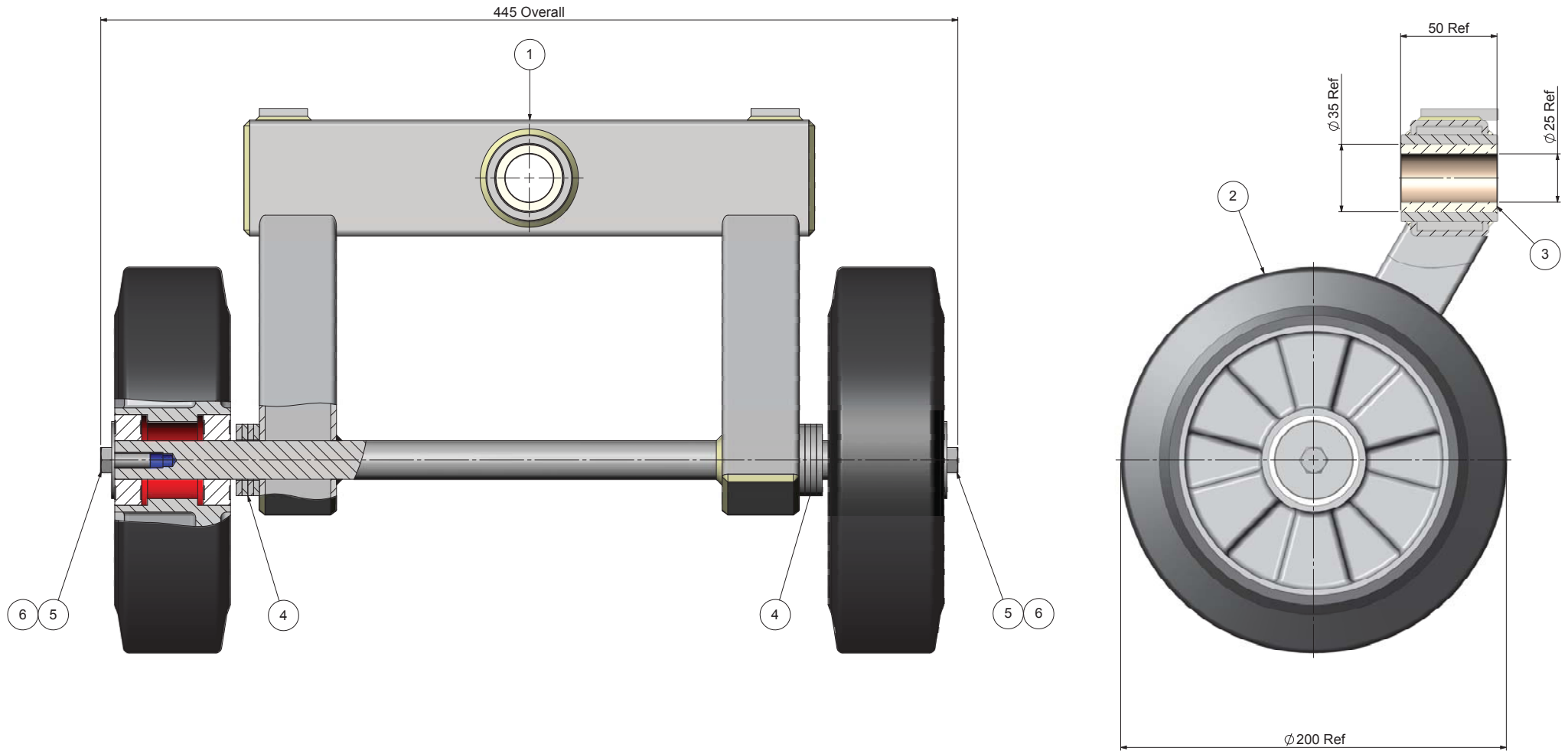
| | |
|-------------------------------|-----------|
| DRAWING No. DFG-460-0017-1 | A2 |
|-------------------------------|-----------|



DFG460-5
Operating Manual

PIVOT FRAME ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|--------------------|
| 1 | 1 | 5501 | Frame |
| 2 | 1 | 5540 | Frame Lock Washer |
| 3 | 1 | 5508 | Cover Plate |
| 4 | 3 | 5515 | Thumb Screw |
| 5 | 2 | BOLT064 | M10 x 40 Set Screw |
| 6 | 1 | BOLT062 | M10 x 30 Set Screw |
| 7 | 2 | NUT005 | M10 Nut |



Note: All Fasteners To Be Secured With Locktite 243 On Assembly

| REVISIONS | | | |
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| 1 | INITIAL RELEASE | 29/10/2013 | BJ |

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| TITLE | | | |
|-----------------------------|----------|----------|------------|
| DFG-360 Axle Frame Assembly | | | |
| FINISH | MATERIAL | DRAWN BY | GDC |
| - | - | SCALE | NTS |
| | | DATE | 09/10/2013 |

| | | |
|-------------|----------------|-----------|
| DRAWING No. | DFG-460-0031-1 | A2 |
|-------------|----------------|-----------|



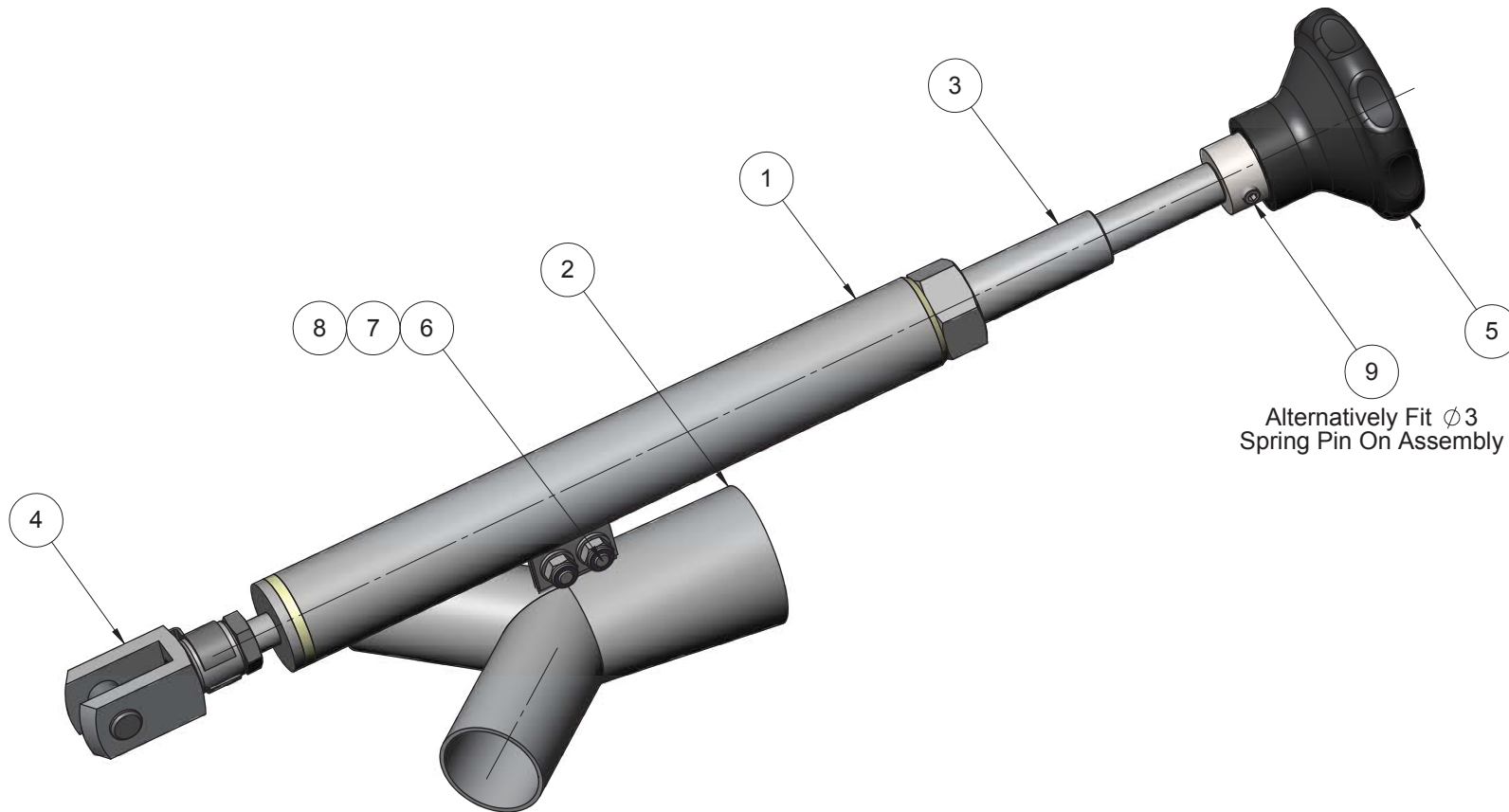
DFG460-5
Operating Manual

AXLE FRAME ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|-----------------------|
| 1 | 1 | 5541 | Axle Assembly |
| 2 | 14 | WASHER009 | M20 Flat Washer |
| 3 | 2 | 2013 | Rear Wheel |
| 4 | 1 | 5031 | Oilite Bush |
| 5 | 2 | BOLT042 | M8 x 20 Set Screw |
| 6 | 2 | WASHER053 | M8 x 40 Repair Washer |

DO NOT SCALE

List of Parts and Materials



| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
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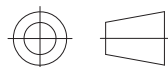
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| | | | |
|---|---------------|--------------------|--------------|
| TITLE. DFG-460 Adjustable Strut Assembly | | | QTY - |
| FINISH - | MATERIAL - | DRAWN BY GDC | SCALE NTS |
| | | DATE 10/10/2013 | |



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|-------------------------------|-----------|
| DRAWING No. DFG-460-0040-1 | A3 |
|-------------------------------|-----------|

Remove Sharp Edges & Corners
All Machined Surfaces To Be Square & Parallel



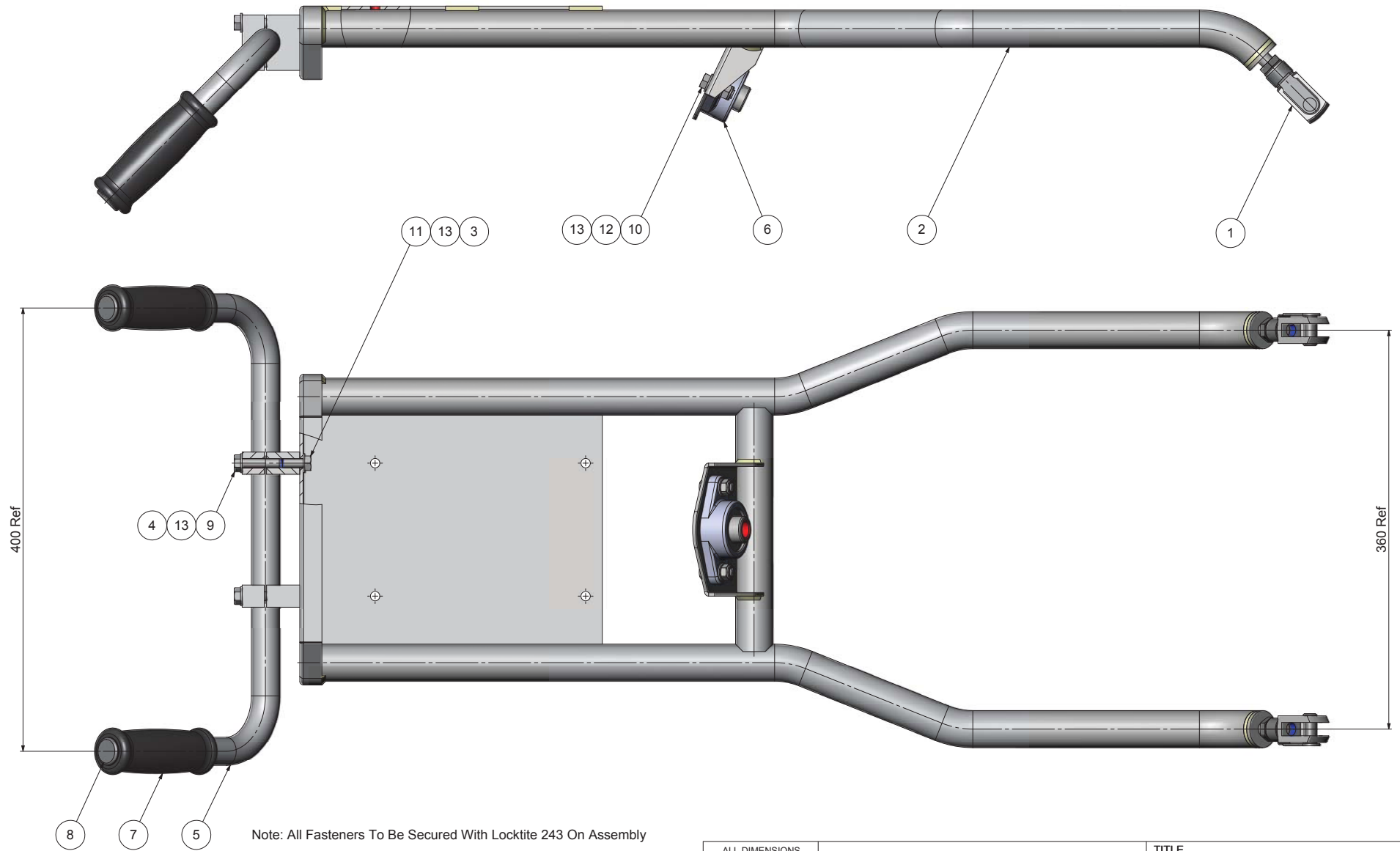
DFG460-5
Operating Manual

ADJUSTABLE STRUT ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|--------------------------|
| 1 | 1 | 5509 | Height Rod |
| 2 | 1 | 5510 | Hose Y Piece |
| 3 | 1 | 5518 | Height Screw |
| 4 | 1 | 9122 | Yoke & Clevis Pin |
| 5 | 1 | 5519 | Handwheel |
| 6 | 2 | BOLT227 | M6 x 16 Cap HD Skt Screw |
| 7 | 2 | NUT043 | M6 Nyloc Nut |
| 8 | 2 | WASHER003 | M6 Flat Washer |
| 9 | 1 | BOLT302 | M6 Grub Screw |

DO NOT SCALE

List of Parts and Materials



Note: All Fasteners To Be Secured With Locktite 243 On Assembly

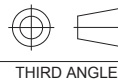
| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
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| | | | |
|--|---------------|--------------------|----------------|
| TITLE: DFG-460 Handle Assembly | | | QTY - |
| FINISH - | MATERIAL - | DRAWN BY GDC | SCALE 1:2.5 |
| | | DATE 14/10/2013 | |
| DRAWING No. DFG-460-0053-1 | | | A2 |



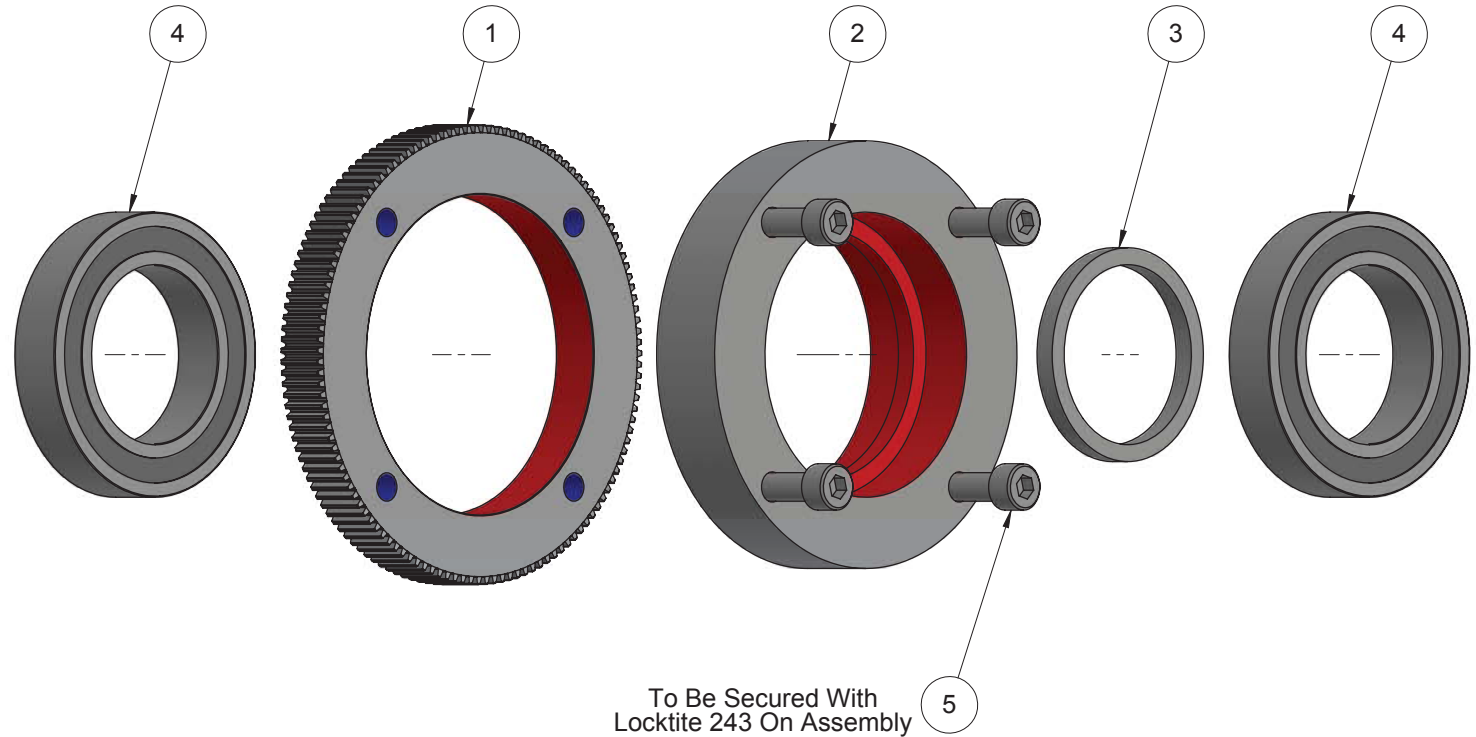
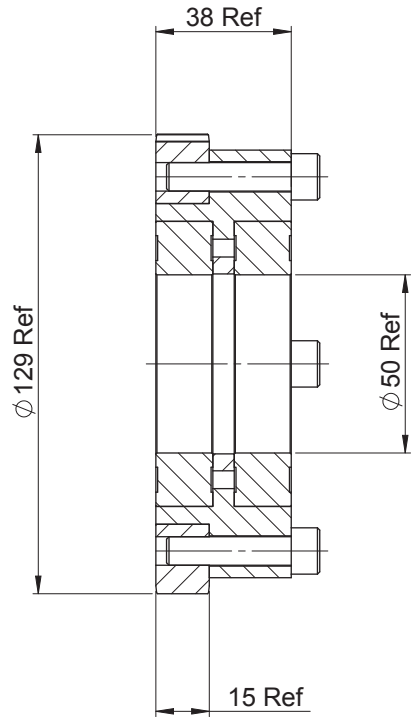
DFG460-5
Operating Manual

HANDLE ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|-------------------|
| 1 | 2 | 9122 | Yoke & Clevis Pin |
| 2 | 1 | 5502 | Handle Assembly |
| 3 | 2 | 5516 | Handle Clamp |
| 4 | 2 | 5516 | Handle Clamp |
| 5 | 1 | 5517 | Handle Bar |
| 6 | 1 | 9134 | Bearing |
| 7 | 2 | 9104 | Hand Grip |
| 8 | 2 | TI/011 | Tube End |
| 9 | 4 | BOLT045 | M8 x 35 Set Screw |
| 10 | 2 | BOLT043 | M8 x 25 Set Screw |
| 11 | 4 | BOLT042 | M8 x 20 Set Screw |
| 12 | 2 | NUT044 | M8 Nyloc Nut |
| 13 | 12 | WASHER004 | M8 Flat Washer |

DO NOT SCALE

List of Parts and Materials



To Be Secured With
Loctite 243 On Assembly

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| 1 | INITIAL RELEASE | 29/10/2013 | BJ |

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| | | | |
|-----------------------------|----------|----------|------------|
| TITLE. | | | QTY |
| DFG-460 Drive Gear Assembly | | | - |
| FINISH | MATERIAL | DRAWN BY | GDC |
| - | - | SCALE | NTS |
| | | DATE | 15/10/2013 |
| DRAWING No. | | | |
| DFG-460-0066-1 | | | A3 |

Remove Sharp Edges & Corners
All Machined Surfaces To Be Square & Parallel



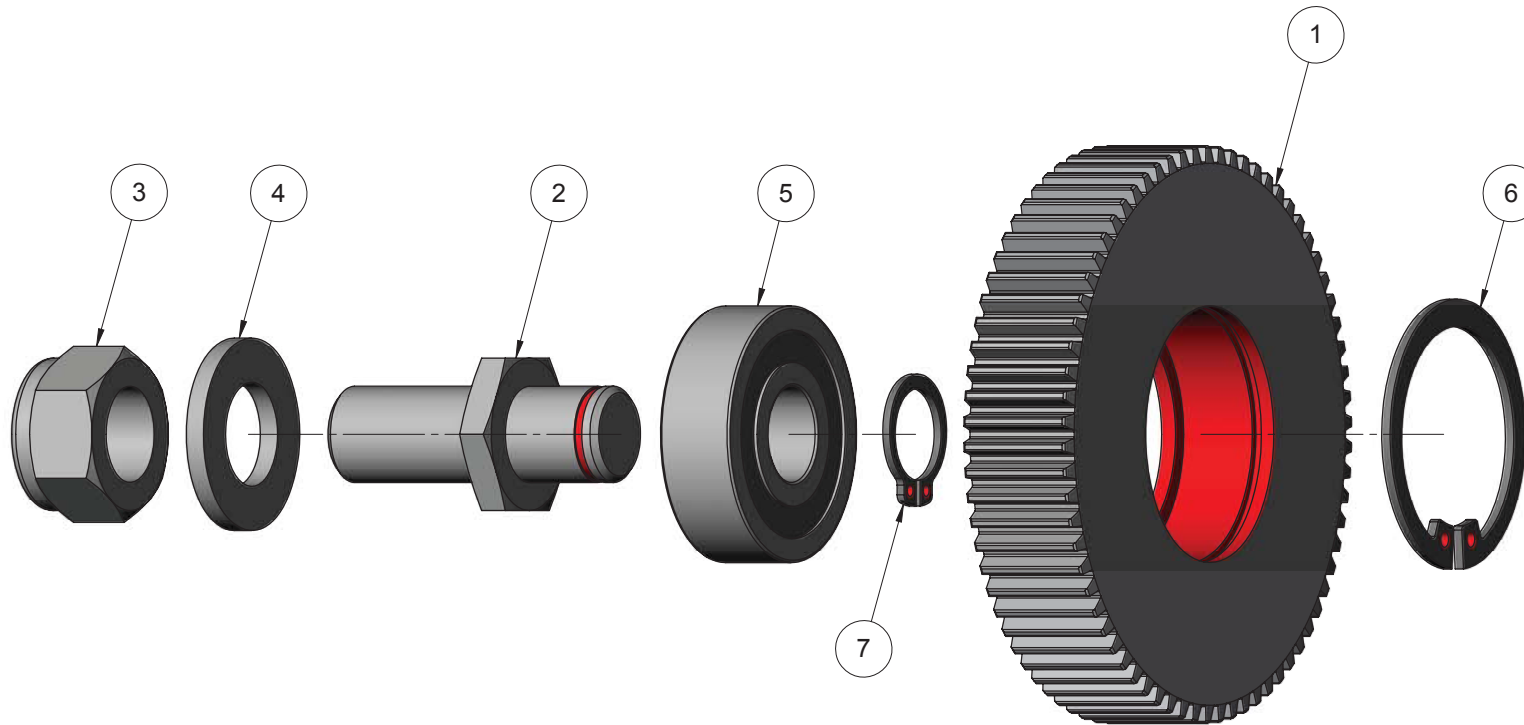
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DRIVE GEAR ASSEMBLY


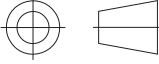
| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|--------------------------|
| 1 | 1 | 5524 | Drive Gear |
| 2 | 1 | 5521 | Bearing Housing |
| 3 | 1 | 5523 | Bearing Spacer |
| 4 | 2 | 5522 | Bearing |
| 5 | 4 | BOLT244 | M8 x 35 Cap HD Skt Screw |

DO NOT SCALE

List of Parts and Materials



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| 1 | INITIAL RELEASE | 29/10/2013 | BJ |

| | | | | | |
|--|--|------------------------------------|------------|----------|-----|
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| | | DFG-460 Intermediate Gear Assembly | | - | |
|  THIRD ANGLE | Tel: +44 (0) 1673 860709/860330 Fax: +44 (0) 1673 861119 Web Site: http://www.spe-int.com E-mail: info@spe-int.com | FINISH | MATERIAL | DRAWN BY | GDC |
| | | - | - | SCALE | NTS |
| | | DATE | 17/10/2013 | | |
| | | DRAWING No. | | A3 | |
| | | DFG-460-0067-1 | | | |

Remove Sharp Edges & Corners
All Machined Surfaces To Be Square & Parallel

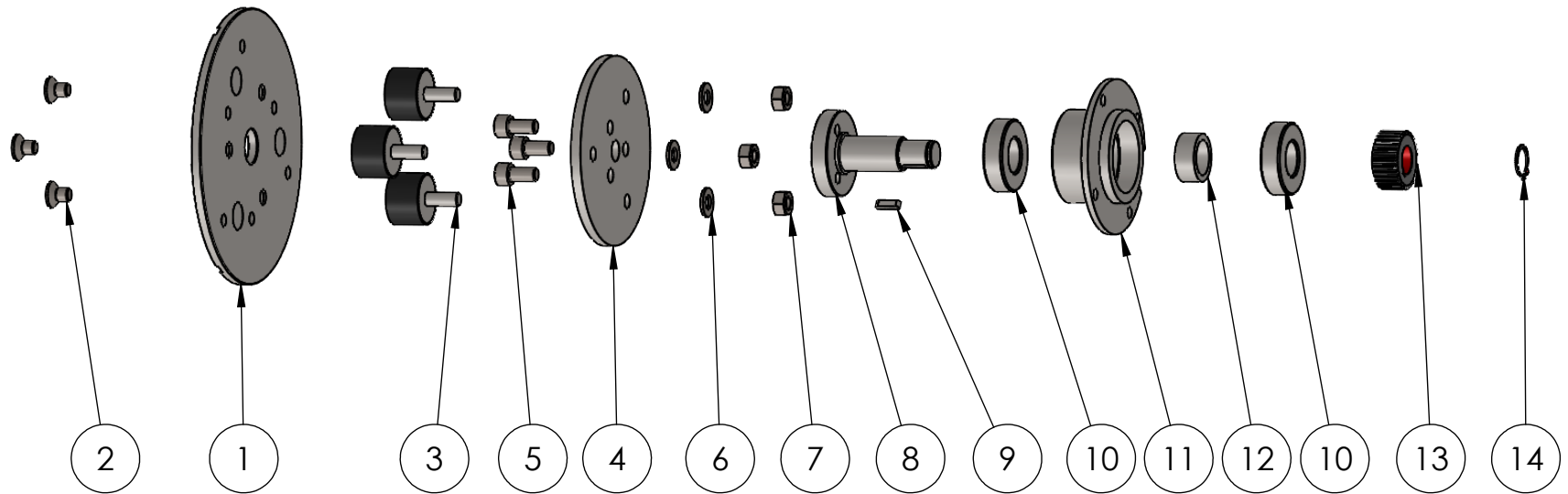
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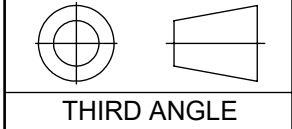
INTERMEDIATE GEAR ASSEMBLY

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|-----------------|
| 1 | 3 | 5536 | Idler Gear |
| 2 | 3 | 5534 | Idler Post |
| 3 | 3 | NUT046 | M13 Nyloc Nut |
| 4 | 3 | WASHER006 | M12 Flat Washer |
| 5 | 3 | 5535 | Bearing |
| 6 | 3 | 5537 | Circlip (Gear) |
| 7 | 3 | 5538 | Circlip (Post) |



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| | | | | | |
|-------------|----------|----------------|------------------------------|-----|-------|
| TITLE | | | DFG-460 Driven Gear Assembly | | QTY |
| | | | | | 3 |
| FINISH | MATERIAL | DRAWN BY | MA | | |
| | | WEIGHT | | | |
| | | DATE | 21/09/2021 | | |
| DRAWING No. | | PART No. | | REV | SCALE |
| 1 | | DFG-460-0068-1 | | 1 | 1:4 |

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---------------|------------------------|------|
| 1 | 5634 | T-Mag Adaptor Plate | 3 |
| 2 | Bolt 145 | M8X12 CSK SKT Screw | 9 |
| 3 | 5532 | Rubber Coupling | 9 |
| 4 | 5531 | DFG460 Driven Plate | 3 |
| 5 | Bolt 246 | M8X16 CAP HD SKT SCREW | 9 |
| 6 | Spring Washer | M8 Spring Washer | 9 |
| 7 | NUT 044 | M8 Nyloc Nut | 9 |
| 8 | 5528 | Driven Shaft | 3 |
| 9 | 9113A | Height Screw Key | 3 |
| 10 | 2213 | Bearing | 6 |
| 11 | 5526 | Bearing Housing | 3 |
| 12 | 5527 | DFG460 Bearing Spacer | 3 |
| 13 | 5529 | DFG460 Driven Gear 32T | 3 |
| 14 | 5530 | DFG460 Shaft Circlip | 3 |



DFG460-5
Operating Manual

ELECTRICAL COMPONENTS

| QTY | PART NUMBER | DESCRIPTION |
|-----|-------------|---|
| 1 | SP3D3215P | Panel & Back Plate |
| 1 | 9254 | Rotary Switch |
| 1 | SPLC1D32F7 | Contactactor |
| 1 | 9256 | Contact Breaker |
| 1 | 156MF@240V | Start Capacitor |
| 1 | 45MF@450V | Run Capacitor |
| 4 | 9245 | Rubber Mount |
| 1 | SP430-404 | 110v 32A 4Pin Panel Socket |
| 1 | SP230-404 | 110v 32A 4Pin Trailing Plug |
| 1 | SPCG/LNM20 | Cable Gland |
| 5 | 7513 | 4.0mm ² Cable - Yellow (mtr) |
| 1 | SP230-304 | 110v 32A 3Pin Trailing Plug |



DFG460-5
Operating Manual

SPECIFICATION SHEET

| | |
|----------------------------------|------------------|
| Type | DFG 460 Electric |
| Part number | DFG460-5 |
| Power output | 2.2kw |
| Voltage | 110v |
| Cycles | 50 |
| Head speed r.p.m. | 231 |
| Engine/motor speed r.p.m. | 1420 |
| Machine dimensions (mm) | |
| Length | 1040 |
| Width | 470 |
| Height | 1080 |
| Weight (kg) | 117 |