# FIBER OPTIC CABLE BLOWING METHOD



98





Blowing cable is different from pulling cable in several ways. During cable pulling, the cable is kept taut and only pull force is applied. It travels in a straight line until a bend or curve changes its path. The cable ultimately rubs on each of the bends or curves, creating friction. As more pulling force is added to counteract the friction, additional stress is added to the cable.

Compared to a pulling application, blowing cable is faster and puts the cable under less stress.

Through cable blowing, contractors are able to install more cable per day with less manpower. This means increased productivity and decreased cost.

# **How To: The Typical Process**

The typical cable blowing process consists of several steps. **First**, the duct integrity is checked. It is pressurized to check for leaks. In order to ensure a successful installation, the duct must be airtight and free of obstruction. Then a small amount of lubricant is poured in the duct and a foam carrier is blown through the run, confirming its integrity.

**Second,** the cable is prepared for installation. A cable carrier is attached to the end of the fiber optic cable. Corresponding size cable carriers are available to match the specific duct ID. The cable is fed through the cable blower and into the duct.

**Third,** the duct is lubricated. Lubricant is added in front of the cable carrier and behind the cable carrier.

**Fourth,** the blowing process begins. Pressure (compressed air) is applied to the duct behind the cable carrier. As the pressure tries to equalize, it seeks out the path of least resistance and creates a pushing force on the cable carrier, causing forward motion. The moving cable carrier, in turn, exerts a pulling force on the cable and begins to move it through the duct.

Meanwhile, an additional pushing force is applied to the cable by a hydraulic powered belt drive on the cable blower. Use of a hydraulic belt drive reduces air consumption requirements from the air compressor. Plus, the push force from the belt drive provides cable slack, reduces back tension and keeps the cable loose and flexible. Friction and resistance are then reduced and the cable can travel freely through the duct work.





# GULFSTREAM<sup>™</sup> 400



# **Gulfstream 400 Fiber Blower**

# The Condux Gulfstream<sup>™</sup> 400 Fiber Optic Cable Blower is ideal for Fiber Installations

As a leader in the manufacture of cable installation tools and equipment, Condux offers a superior Fiber Optic Cable Blower that is compact and lightweight, making it ideally suited for your most difficult job sites.

#### Fast

Install fiber optic cable up to 300 fpm (100 mpm) (recommended 180-220 fpm (55-67 mpm)). A carrier can be attached to the front of the cable to help propel the fiber down an air-tight sealed duct. Because air flow and belt drive speed can be adjusted, you can install fiber at the rate which best suits your application.

#### Total Control

The Condux Gulfstream 400 Fiber Optic Cable Blower features a long belt grip area for less stress on the cable, and a manual cylinder on the belt feed to better control down pressure. Condux's patented traction control system shuts down the blower when problems with cable slippage or duct blockage are detected, adding safety to every job and preventing costly cable damage.

A speed and distance counter with LCD read-out, as well as convenient hydraulic and pneumatic controls, come standard with the Condux Fiber Optic Cable Blower. Blowers equipped with the Advanced Electronic Control System will shut down if slippage, over-speed or cable stoppage are detected.

#### Versatility

The Condux Gulfstream 400 Fiber Optic Cable Blower operates efficiently with most common combinations of cable and innerduct sizes. The Condux Gulfstream 400 Fiber Optic Cable Blower is designed for the installation of fiber optic cables with diameters from 0.23" (5.8 mm) to 1.13" (28.7 mm) into micro duct 10 mm to 18 mm and traditional innerduct ½" (13 mm) to 2" (51 mm) with metric sizes available.

The correct size cable seals and venturi must be determined for the cable being installed. Also necessary are the correct size innerduct seals, clamps and carrier for the innerduct being occupied.

Use the charts on page 104-105 to determine the correct size components for your specific cable and innerduct installation project.





# GULFSTREAM<sup>™</sup> 400



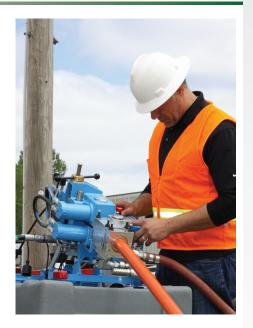
# **Superior Service & Support**

The Condux Fiber Optic Cable Blower is precision manufactured in the USA by Condux International, Inc. Decades of technical experience and superior customer service are behind every product sold.

# **Smart Design, Easy to Operate**

Convenient tilting of the Condux Gulfstream 400 Fiber Optic Cable Blower for ease of pouring in lubricant. Easily install cable into belt, then close and you are ready to start.

Hydraulic & pneumatic controls are ergonomically designed and conveniently located. No special maintenance is required.



# Lightweight & Portable, Everything's Inside

The Condux Gulfstream 400 Fiber Optic Cable Blower is extremely easy to handle and transport. The blower and all accessories including hydraulic hoses, cable and conduit packs and seal kits conveniently fit into a lightweight job box with wheels.











# **Belt Drive**

Single belt drive provides for smooth and quiet operation. The belt can be easily removed and replaced making maintenance fast and simple.

 Part Number
 Description

 08780904
 Gulfstream 400 Replacement Belt

# **Advanced Electronic Controls**

Standard system monitors and displays the cable and belt drive speeds. When using traction control it will automatically shut off the blower in these conditions:

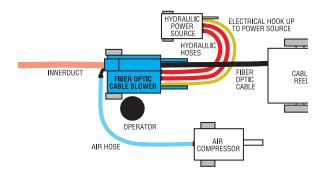
- Over pressure limit
- Slippage
- Cable stoppage

| Part Number | Description                                |
|-------------|--|
| 08781020    | Electronic Control Box                     |
| 08781022    | Electronic Control Box & Transducer Update |
| 08781023    | Transducer                                 |
| 02290843    | ECB Fuse                                   |



# Hinged Air Block & Conduit Clamp

The Condux Fiber Optic Cable Blower features a hinged air block and a hinged conduit clamp that are easily secured and opened with the use of a ratchet.



# **Dual Power System**

Designed to operate with two power supplies that work in tandem in order to produce the most steady, efficient and reliable power to blow cable. A hydraulically-powered belt drive supplements the pressurized air force, thus decreasing the CFM requirements of the air compressor. This means greater cable blowing efficiency using a much smaller air compressor.

 Part Number
 Description

 08780384
 Hydraulic Hose with flow control manifold





The Condux Gulfstream<sup>™</sup> 400 Fiber Optic Cable Blower is easy to order. The base unit comes complete with a job box, hydraulic hoses and everything listed below in the "Common Parts Kit." Complete the order by specifying the cable pack(s) and duct pack(s) necessary to meet your exact job requirements. See pages 104-105 for full descriptions. You may order additional cable and duct packs at any time.

| Part Number  | Description  |
|--------------|--|
| 08782000     | Fiber Optic Cable Blower   |
| 08782000INTL | Fiber Optic Cable Blower w/ Int'l Fittings   |
| 08782010     | Fiber Optic Cable Blower Package 1A<br>(includes Cable Packs #1-7 and Duct Packs #2-5) |
| 08782008     | Fiber Optic Cable Blower Package 1B  |

#### Mechanical Version (No Electronic Control Box or Sensors)

| Part Number  | Description   |
|--------------|---|
| 08782004     | Fiber Optic Cable Blower  |
| 08782004INTL | Fiber Optic Cable Blower w/Int'l Fittings   |
| 08782046     | Fiber Optic Cable Blower Package 2A<br>(includes Cable Packs #1-7 and Duct Packs #2-5)        |
| 08782048     | Fiber Optic Cable Blower Package 2B<br>(includes Cable Packs #1-7 and Duct Packs #4, 5, 6)    |
| 08782054     | Fiber Optic Cable Blower Package 2C<br>(includes Cable Packs #1-7 and Duct Packs #9, 10, 14)  |
| 08782056     | Fiber Optic Cable Blower Package 2D<br>(includes Cable Packs #1-7 and Duct Packs #14, 15, 17) |

#### Select your Cable Pack(s): (minimum one required)

**Cable Packs** include Cable Grips (for end of cable), Pneumatic Venturies and Cable Seals. See page 105 for ordering information.

| Part Number | Description  |
|-------------|--|
| 08780393    | Cable Pack #1 — 0.23-0.34 in (5.8-8.8 mm)                              |
| 08780394    | Cable Pack #2 — 0.35-0.48 in (8.9-12.2 mm)                             |
| 08780512    | Cable Pack #3 — 0.49-0.60 in (12.4-15.2mm)                             |
| 08780395    | Cable Pack #4 — 0.61-0.73 in (15.3-18.5 mm)                            |
| 08780513    | Cable Pack #5 — 0.74-0.85 in (18.8-21.6mm)                             |
| 08780396    | Cable Pack #6 — 0.86-0.97 in (22.0-24.5 mm)                            |
| 08780514    | Cable Pack #7 — 0.98-1.13 in (24.9-28.7 mm)                            |
| 08781117    | Cable Pack #8 — 10.4 x 5.5 mm (Nylatron Venturi for flat fiber cables) |
| 08781118    | Cable Pack #9 — 15.2 x 6.7 mm (Nylatron Venturi for flat fiber cables) |

#### Select your Duct Pack(s): (minimum one required)

**Duct Packs** include Cable Grip (for end of innerduct), Cable Carrier, Innerduct Clamps, Innerduct Seals, Innerduct Pulling Eye & Foam Carriers. See page 104 for ordering information.

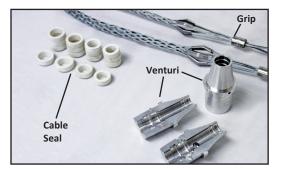
| Part Number | Description                             |
|-------------|---|
| 08780795    | Duct Pack #1 — .5" SDR 11/13.5          |
| 08780680    | Duct Pack #2 — .75" (27 mm) SDR 11/13.5 |
| 08780386    | Duct Pack #3 — 1" SDR 11/13.5           |
| 08780392    | Duct Pack #4 — 1.25" SDR 11/13.5        |
| 08780397    | Duct Pack #5 — 1.5" SDR 11/13.5         |
| 08780930    | Duct Pack #6 — 2" SDR 11/13.5           |
| 08781120    | Duct Pack #7 — 20 mm                    |
| 08781153    | Duct Pack #8 — 22 mm                    |
| 08780240    | Duct Pack #9 — 25 mm                    |
| 08780385    | Duct Pack #10 — 32 mm                   |
| 08780387    | Duct Pack #11 — 36 mm                   |
| 08780388    | Duct Pack #12 — 37 mm                   |
| 08780389    | Duct Pack #13 — 1.25" TRUE              |
| 08780390    | Duct Pack #14 — 40 mm                   |
| 08780391    | Duct Pack #15 — 42 mm                   |
| 08780545    | Duct Pack #16 — 44 mm                   |
| 08780575    | Duct Pack #17 — 50 mm                   |



#### **Common Parts Kit:**

(included with all blower units)

| Part Number      | Description                                    |
|------------------|--|
| 08780120         | Common Parts Kit (included with all ECB units) |
| 08780952         | Common Parts Kit (for Mechanical Version)      |
| Kits include the | following:                                     |
| 02290222         | Small Case                                     |
| 08780506         | Foam Insert for Small Case                     |
| 02284600         | Small Divided Case                             |
| 02288774         | Parts Label for Small Divided Case             |
| 08780126         | O-Ring Seal Kit                                |
| 02286416*        | 2 Pin Extension Cord                           |
| 08230800         | Canvas Bag                                     |
| 08017000         | 5/8" x 600 lb Swivel (16 mm x 2,669 N)         |
| 08780424         | Capscrew Set (12-M04-07)                       |
| 08761248*        | Power Cord Assembly with Lighter Plug          |
| 02289620         | Wrench, 3/4"                                   |
| 02290168         | Standard & Metric Hex Key Set                  |
| 02283800         | Hex Ball Driver 3/32"                          |
| 02288787         | Hex Ball-Point Driver 2.5mm                    |
| 02291090         | 9/16" Comb-Ratchet Wrench                      |
| 08780223         | Venturi Air Plug (Seal Disk)                   |
| *Not included in | n kit 08780952                                 |







# **Gulfstream 400 & Mini-Blower Pusher Duct Packs**

|      | Duct F               | Pack           | Duct               | Clamp                       | Duct               | t Seal         | Ca                                   | rier                 | Foam                  | Carrier        | Cable                     | e Grip         | Innerduct Eye                       |
|------|----------------------|----------------|--------------------|-----------------------------|--------------------|----------------|--------------------------------------|----------------------|-----------------------|----------------|---------------------------|----------------|-------------------------------------|
| Pack | Duct Size            | Part<br>Number | Duct<br>OD<br>(mm) | Part<br>Number              | Duct<br>OD<br>(mm) | Part<br>Number | Carrier<br>OD<br>(mm)                | Part<br>Number       | Carrier<br>OD<br>(mm) | Part<br>Number | Duct<br>OD<br>(mm)        | Part<br>Number | Part Number<br>and ID Range<br>(mm) |
| 1    | 1/2"<br>SDR 11-13.5  | 08780795       | 0.840"<br>(21.3)   | 08780791                    | 0.840"<br>(21.3)   | 08780786       | 0.688"<br>(17.50)                    | 08780793             | 0.75"<br>(19.0)       | 08078300       | 0.75-0.99"<br>(19-25)     | 08643131       | 08913342<br>.7177"<br>(18-20)       |
| 2    | 3/4"<br>SDR 11-13.5  | 08780680       | 1.050"<br>(26.6)   | 08780682                    | 1.050"<br>(26.6)   | 08780685       | 0.750"<br>(19.0)                     | 08780690             | 0.75"<br>(19.0)       | 08078300       | 1.00-1.24"<br>(25.4-31.5) | 08643137       | 08761840<br>.7187"<br>(18-22)       |
| 3    | 1"<br>SDR 11/13.5    | 08780386       | 1.315"<br>(33.4)   | 08780369                    | 1.315"<br>(33.4)   | 08780307       | 1.121"<br>(28.5)                     | 08761250             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(32-38)     | 08643143       | 08913343<br>.75-1.00"<br>(19-25)    |
| 4    | 1.25"<br>SDR 11/13.5 | 08780392       | 1.660"<br>(42.2)   | 08780375                    | 1.660"<br>(42.2)   | 08780051       | 1.414"<br>(35.9)                     | 08761255             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761842<br>1.06-1.43"<br>(27-36)   |
| 5    | 1.5"<br>SDR 11/13.5  | 08780397       | 1.900"<br>(48.3)   | 08780404                    | 1.900"<br>(48.3)   | 08780398       | 1.618"<br>(41.1)                     | 08761260             | 1.75"<br>(44.5)       | 08761441       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761844<br>1.37-1.68"<br>(35-43)   |
| 6    | 2"<br>SDR 11/13.5    | 08780930       |                    | 08780920<br>2" Duct Adapter |                    |                | 2.023"<br>(51.4)                     | 08761265             | 2.00"<br>(50.8)       | 08761442       | 2.00-2.49"<br>(50.8-63.2) | 08643155       | 08761846<br>1.80-2.19"<br>(46-56)   |
| 7    | 20mm                 | 08781120       | 0.787"<br>(20.0)   | 08781122                    | 0.787"<br>(20.0)   | 08781121       | 0.688"<br>(17.5)                     | 08780793             | 1.00"<br>(25.4)       | 08761444       | 0.75-0.99"<br>(19.0-25.1) | 08643131       | 08914007<br>.551813"<br>(14-20)     |
| 8    | 22mm                 | 08781153       | 0.866"<br>(22.0)   | 08781154                    | 0.866"<br>(22.0)   | 08781155       | 0.688"<br>(17.5)                     | 08780793             | 1.00"<br>(25.4)       | 08761444       | 0.75-0.99"<br>(19.0-25.1) | 08643131       | 08914007<br>.551813"<br>(14-20)     |
| 9    | 25mm                 | 08780240       | 0.984"<br>(25.0)   | 08780099                    | 0.984"<br>(25.0)   | 08780134       | 0.787"<br>(20.0)                     | 08780230             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643137       | 08761840<br>.7187"<br>(18-22)       |
| 10   | 32mm                 | 08780385       | 1.260"<br>(32.0)   | 08780368                    | 1.260"<br>(32.0)   | 08780306       | 1.063"<br>(27.0)                     | 08761560             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 11   | 36mm                 | 08780387       | 1.417"<br>(36.0)   | 08780370                    | 1.417"<br>(36.0)   | 08780308       | 1.181"<br>(30.0)<br>1.220"<br>(31.0) | 08761643<br>08761555 | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 12   | 37mm                 | 08780388       | 1.457"<br>(37.0)   | 08780371                    | 1.457"<br>(37.0)   | 08780309       | 1.220"<br>(31.0)                     | 08761555             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 13   | 1.25" TRUE           | 08780389       | 1.500"<br>(38.1)   | 08780372                    | 1.500"<br>(38.1)   | 08780333       | 1.250"<br>(31.7)                     | 08761670             | 1.50"<br>(38.1)       | 08761440       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 14   | 40mm                 | 08780390       | 1.575"<br>(40.0)   | 08780373                    | 1.575"<br>(40.0)   | 08780334       | 1.299"<br>(33.0)                     | 08761525             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 15   | 42mm                 | 08780391       | 1.653"<br>(42.0)   | 08780374                    | 1.653"<br>(42.0)   | 08780335       | 1.378"<br>(35.0)                     | 08761660             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761844<br>1.37-1.68"<br>(35-43)   |
| 16   | 44mm                 | 08780545       | 1.732"<br>(44.0)   | 08780546                    | 1.732"<br>(44.0)   | 08780547       | 1.496"<br>(38.0)                     | 08761786             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761844<br>1.37-1.68"<br>(35-43)   |
| 17   | 50mm                 | 08780575       | 1.969"<br>(50.0)   | 08780435                    | 1.969"<br>(50.0)   | 08780431       | 1.606"<br>(40.0)                     | 08761579             | 2.00"<br>(50.8)       | 08761442       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761844<br>1.37-1.68"<br>(35-43)   |

# Micro Duct Packs: Gulfstream<sup>™</sup> 400 & Mini-Blower/Pusher

| Duct Size OD<br>(MM) | Part Number | Duct Clamp | Duct Seal | End Stop Connector |
|----------------------|-------------|------------|-----------|--------------------|
| 10                   | 08764140    | 08764142   | 08764143  | 08566325           |
| 12                   | 08764110    | 08764112   | 08764113  | 08566327           |
| 12.7                 | 08764150    | 08764151   | 08764153  | 08566338           |
| 14                   | 08764120    | 08764122   | 08764123  | 08566328           |
| 16                   | 08764130    | 08764132   | 08764133  | 08566329           |
| 18                   | 08781110    | 08781106   | 08781101  | 08566334           |





# **Gulfstream 400 Cable Packs**

|      | Cable Pack       |  | Venturi                                  |  | Cable S                          | eal                              | Cable Grip       |                                  |          |               |          |
|------|------------------|--|--|--|----------------------------------|----------------------------------|------------------|----------------------------------|----------|---------------|----------|
| Pack | Cable OD         | Part<br>Number                                       | Cable OD                                 | Part<br>Number   | Cable OD                         | Part<br>Number                   | Cable OD         | Part<br>Number                   |          |               |          |
| 1    | 0.23" - 0.34"    | 08780393   | 08780393 0.23" - 0.34"                   | 00700001   | 0.23" - 0.28"<br>(5.8 - 7.2 mm)  | 08780406                         | 0.21" - 0.35"    | 00040754                         |          |               |          |
|      | (5.8 - 8.8 mm)   | Pack #1  | (5.8 - 8.8 mm)                           | 08780281   | 0.29" - 0.34"<br>(7.3 - 8.8 mm)  | 08780407                         | (5.3 - 8.9 mm)   | 08643754                         |          |               |          |
| 2    | 0.35" - 0.48"    | 08780394   | 0.35" - 0.48"                            | 08781115   | 0.35" - 0.42"<br>(8.9 -10.7 mm)  | 08761424                         | 0.32" - 0.48"    | 08643755                         |          |               |          |
| 2    | (8.9 - 12.2 mm)  | Pack #2  | (8.9 - 12.2 mm)                          | 00701113   | 0.43" - 0.48"<br>(10.8 -12.2 mm) | 08761425                         | (8.1 - 12.2 mm)  | 00043733                         |          |               |          |
| 3    | 0.49" - 0.60"    | 08780512   | 0.49" - 0.60"                            | 08781116   | 0.49" - 0.55"<br>(12.3 -14.0 mm) | 08761426                         | 0.42" - 0.61"    | 08643756                         |          |               |          |
| 5    | (12.3 - 15.2 mm) | Pack #3  | Pack #3                                  | (12.3 - 15.2 mm)   | 00701110                         | 0.56" - 0.60"<br>(14.1 -15.2 mm) | 08761427         | (10.7 - 15.5 mm)                 | 00040700 |               |          |
| 4    | 0.61" - 0.73"    | 08780395 0.61" - 0.73"<br>Pack #4 (15.3 - 18.5 mm) 0 |  | 08780284   | 0.61" - 0.67"<br>(15.3 -17.0 mm) | 08761428                         | 0.53" - 0.74"    | 08643757                         |          |               |          |
|      | (15.3 - 18.5 mm) |  |  | Pack #4 (15.3 - 18.5 mm) 0.68"                           | 0.68" - 0.73"<br>(17.1 -18.5 mm) | 08761429                         | (13.5 - 18.8 mm) |                                  |          |               |          |
| 5    | 0.74" - 0.85"    | 08780513 0.74" - 0.85"<br>Pack #5 (18.6 - 21.6 mm)   |  | 0.74" - 0.85" 08780513 0.74" - 0.85" 08780285 (18.       | 0.74" - 0.85"                    |                                  |                  | 0.74" - 0.79"<br>(18.6 -20.1 mm) | 08761430 | 0.64" - 0.87" | 08643758 |
| Ŭ    | (18.6 - 21.6 mm) |  | (18.6 - 21.6 mm)                         |  | 0.80" - 0.85"<br>(20.2 -21.8 mm) | 08761431                         | (16.3 - 22.1 mm) |                                  |          |               |          |
| 6    | 0.86" - 0.97"    | 08780396 0.  | 08780396                                 | 0.86" - 0.97"  | 08780286                         | 0.86" - 0.92"<br>(21.7 -23.4 mm) | 08761432         | 0.75" - 1.00"                    | 08643759 |               |          |
|      | (21.7 - 24.6 mm) | Pack #6  | (21.7 - 24.6 mm)                         | 00700200   | 0.93" - 0.97"<br>(23.5 -24.6 mm) | 08761433                         | (19.1 - 25.4 mm) | 00040100                         |          |               |          |
| 7    | 0.98" - 1.13"    | 08780514 0.98"                                       |  | 08780446   | 0.98" -1.04"<br>(24.7 -26.4 mm)  | 08761434                         | 1.00" - 1.24"    | 08643137                         |          |               |          |
|      | (24.7 - 28.7 mm) | Pack #7  |  | Pack #7 (24.7 - 28.7 mm) 1.05" -1.13"<br>(26.5 -28.7 mm) | 08761435                         | (25.4 - 31.5 mm                  | 0000101          |                                  |          |               |          |
| 8    | 10.4 x 5.5 mm    | 08781117   | (Nylatron venturi for flat fiber cables) |  |                                  |                                  |                  |                                  |          |               |          |
| 9    | 15.2 x 6.7 mm    | 08781118   | (Nylatron venturi for flat fiber cables) |  |                                  |                                  |                  |                                  |          |               |          |

# **Compressed Air Recommendations**

For best installation results, we recommend a 375 CFM compressor or larger with at least 100 psi. A compressed air water separator and aftercooler are also highly recommended-- whether built-in to the compressor or as an additional unit in line between the compressor and fiber blower.



# **GULFSTREAM™ 400 MICRODUCT ACCESSORIES**



# **Micro Duct Pressure Gauge Kit**

Use the Micro Duct Pressure Gauge Kit in conjunction with Air Valve Plugs for pressurizing Micro Duct to prevent kinking and crushing during installation. (Required and sold separately from Micro Duct Installation Kits)

| Part Number  | Description                              |
|--------------|--|
| 08780705     | Micro Duct Pressure Gauge                |
| 08780705INTL | Micro Duct Pressure Gauge, international |



# **Multiple Micro Duct Installation Kits**

Condux Multiple Micro Duct Installation Kits allow you to install up to 5 - 10/8 micro ducts, 4 - 12/10 micro ducts or other multiple micro duct configurations into an existing innerduct when used with the Condux Gulfstream<sup>™</sup> 400 Fiber Optic Cable Blower. Microduct pressure gauge kit is required (sold separately).

| Part Number | Description   |
|-------------|---|
| 08780710    | 10/8 mm Multiple Micro Duct Installation Kit              |
| 08780712    | 12/10 mm Multiple Micro Duct Installation Kit             |
| 08780770    | 12.7 mm Multiple Micro Duct Installation Kit              |
| 08780797    | 16 mm Multiple Micro Duct Installation Kit                |
| 08780878    | 14/10 mm Multiple Micro Duct Installation Kit             |
| 08780747    | 1-16 mm & 2-12/10 mm Multiple Micro Duct Installation Kit |
| 08780723    | Flat Belt for Flat Fiber                                  |





| 10/8 mm Kit<br>(up to 5) |                     |  |  |  |
|--------------------------|---------------------|--|--|--|
| Part Number              | Description         |  |  |  |
| 08645705                 | Cable Grip          |  |  |  |
| 08780720                 | Lower Belt          |  |  |  |
| 08780721                 | Upper Belt          |  |  |  |
| 08780724                 | Rear Guide Assembly |  |  |  |
| 08780735                 | 5-Hole Venturi      |  |  |  |
| 08780739                 | Venturi Plugs       |  |  |  |
| 08780740                 | Duct-Fill Plugs     |  |  |  |
| 08780741                 | Duct-Cap Plugs      |  |  |  |
| 08780742                 | Rear Guide          |  |  |  |
| 08780748                 | Proofing Balls      |  |  |  |

| 16 mm Kit<br>(up to 2) |                     |  |  |
|------------------------|---------------------|--|--|
| Part Number            | Description         |  |  |
| 08645710               | Cable Grip          |  |  |
| 08783383               | Proofing Balls      |  |  |
| 08780721               | Upper Belt          |  |  |
| 08780723               | Lower Belt          |  |  |
| 08780796               | 2-Hole Venturi      |  |  |
| 08780734               | Rear Guide          |  |  |
| 08780743               | Duct-Fill Plugs     |  |  |
| 08780745               | Duct-Cap Plugs      |  |  |
| 08780724               | Rear Guide Assembly |  |  |

| 12/10 mm Kit<br>(up to 4) |                     |  |
|---------------------------|---------------------|--|
| Part Number               | Description         |  |
| 08645705                  | Cable Grip          |  |
| 08780722                  | Lower Belt          |  |
| 08780722                  | Upper Belt          |  |
| 08780724                  | Rear Guide Assembly |  |
| 08780725                  | 4-Hole Venturi      |  |
| 08780729                  | Venturi Plugs       |  |
| 08780730                  | Duct-Fill Plugs     |  |
| 08780731                  | Duct-Cap Plugs      |  |
| 08780732                  | Rear Guide          |  |
| 08780750                  | Proofing Balls      |  |
| 1                         |                     |  |

| 12.7 mm Kit<br>(up to 4) |                     |  |
|--------------------------|---------------------|--|
| Part Number Description  |                     |  |
| 08645705                 | Cable Grip          |  |
| 08780722                 | Lower Belt          |  |
| 08780722                 | Upper Belt          |  |
| 08780724                 | Rear Guide Assembly |  |
| 08780732                 | Rear Guide          |  |
| 08780750                 | Proofing Balls      |  |
| 08780771                 | 4-Hole Venturi      |  |
| 08780772                 | Venturi Plugs       |  |
| 08780774                 | Duct-Cap Plugs      |  |
| 08780776                 | Duct-Fill Plugs     |  |

| 14/10 mm Kit<br>(up to 3) |                     |  |
|---------------------------|---------------------|--|
| Part Number               | Description         |  |
| 08645710                  | Cable Grip          |  |
| 08783382                  | Proofing Balls      |  |
| 08780883                  | Upper Belt          |  |
| 08780882                  | Lower Belt          |  |
| 08780879                  | 3-Hole Venturi      |  |
| 08780886                  | Rear Guide          |  |
| 08780730                  | Duct-Fill Plugs     |  |
| 08780731                  | Duct-Cap Plugs      |  |
| 08780724                  | Rear Guide Assembly |  |

| 1-16 mm &<br>2-12/10 mm Kit |                       |  |
|-----------------------------|-----------------------|--|
| Part Number                 | Description           |  |
| 08645710                    | Cable Grip            |  |
| 08017000                    | Swivel                |  |
| 08783383                    | Proofing Balls 16/13  |  |
| 08783382                    | Proofing Balls 12/10  |  |
| 08780733                    | 3-Hole Venturi        |  |
| 08780734                    | Rear Guide            |  |
| 08780743                    | Duct-Fill Plugs 16/13 |  |
| 08780745                    | Duct-Cap Plugs 16/13  |  |
| 08780730                    | Duct-Fill Plugs 12/10 |  |
| 08780731                    | Duct-Cap Plugs 12/10  |  |
| 08780724                    | Rear Guide Assembly   |  |



# GULFSTREAM<sup>™</sup> 400 ACCESSORIES



# Gulfstream<sup>™</sup> 400 High Density Fiber Conversion Kit

With installation of the Gulfstream 400 High Density Fiber Conversion Kit on a Gulfstream 400 Fiber Blower, the blower is capable of installing large diameter ultra-high density OSP fiber into HDPE duct. The larger air block can accommodate 1" - 2" innerduct and fiber cable ranging from 0.49" to 1.54" (12.4 to 39.1 mm).

#### **Conversion Kit**

| Part Number  | Description                                      |
|--------------|--|
| 08782625     | Gulfstream 400 High Density Fiber Conversion Kit |
|              |  |
| Duct Packs ( | minimum of one required)                         |
| Part Number  | Description                                      |

| Part Number |          | Description       |             |    |
|-------------|----------|-------------------|-------------|----|
|             | 08761370 | Duck Pack - 1"    | SDR 11/13.5 | 08 |
|             | 08761375 | Duck Pack - 1.25" | SDR 11/13.5 | 08 |
|             | 08761380 | Duck Pack - 1.5"  | SDR 11/13.5 | 0  |
|             | 08761385 | Duck Pack - 2"    | SDR 11/13.5 |    |
|             |          |                   |             |    |

# **Y-Block**

The Condux "Y"-Block is designed for installing a micro duct or fiber cable into an existing occupied duct, when coupled to the Gulfstream 400 Fiber Optic Cable Blower.

| Part Number | Description |
|-------------|-------------|
| 08761850    | Y-Block     |

Common Parts Package: (Included with all Y-Blocks).

| Part Number | Description   |
|-------------|---|
| 02283800    | All Wrench <sup>3</sup> / <sub>32</sub>                   |
| 02283900    | Socket Hex Deep Well <sup>11</sup> / <sub>16</sub> "      |
| 02284000    | Ratchet, <sup>3</sup> / <sub>8</sub> " Drive 6.75 in Long |
| 08761443    | Seal Kit Replacement                                      |
| 08761868    | Inflatable Shuttle for 1.00-1.25                          |
| 08761869    | Inflatable Shuttle for 1.50-2.00                          |
| 08761884    | Cable Seal for .3550 Cable                                |
| 08761885    | Cable Seal for .5190 Cable                                |
| 08761438    | Capscrew Set  |

#### Y-Block Duct Packs (sold separately)

(Each duct pack comes with 2-seals & 2-clamps).

| Part Number | Description                      | Duct OD |  |
|-------------|----------------------------------|---------|--|
| 08761386    | Y Block Duct Pack - 1.315 (33.4) | 1.315"  |  |
| 08761826    | Y Block Duct Pack - 1.570 (40.0) | 1.570"  |  |
| 08761387    | Y Block Duct Pack - 1.660 (42.2) | 1.660"  |  |
| 08761388    | Y Block Duct Pack - 1.900 (48.3) | 1.900"  |  |
| 08761389    | Y Block Duct Pack - 2.375 (60.3) | 2.375"  |  |

## **Low PSI Shuttles**

These unique, flexible shuttles are available in triple parachute configuration, making rope, pull tape and fiber optic cable installation in occupied duct a breeze. These shuttles can be used on their own or in series allowing for up to six parachutes to capture the air within the conduit, which can help increase installation distances. The parachutes collapse without constant air pressure allowing for easy pullback. Rated for 3 psi.

| Duct S    | ize               |
|-----------|-------------------|
| (in)      | (mm)              |
| 1.00-1.25 | 25-32             |
| 1.50-2.00 | 38-50             |
|           | (in)<br>1.00-1.25 |



## Cable Packs (minimum of one required)

| Part Number | Description |                |  |
|-------------|-------------|----------------|--|
| 08782638    | 0.49"-0.60" | (12.4-15.3 mm) |  |
| 08782637    | 0.61"-0.73" | (15.4-18.5 mm) |  |
| 08782636    | 0.74"-0.85" | (18.6-21.6 mm) |  |
| 08782635    | 0.86"-0.97" | (21.7-24.6 mm) |  |
| 08782634    | 0.98"-1.13" | (24.7-28.7 mm) |  |
| 08782633    | 1.14"-1.25" | (28.8-31.8 mm) |  |
| 08782632    | 1.26"-1.34" | (31.9-34.0 mm) |  |
| 08782631    | 1.35"-1.54" | (34.1-39.1 mm) |  |
|             |             |                |  |



## **Features & Benefits**

- Portable
- Easy to Use
- Duct Range 1.315" 2.375" (33 mm 60 mm) OD
- Cable Seal Range 0.35" -0.90" (9 mm 23 mm) OD
- Aluminum Construction
- Built-in Carrying Handles
- Canvas Storage Bag





FIBER CABLE INSTALLATION

# **MINI-BLOWER PUSHER**



# **Mini-Blower/Pusher**

The Mini-Blower/Pusher from Condux is the lightweight, portable solution for easy installation of micro fiber and traditional fiber optic cable. The compact unit is ideally suited for your most difficult job sites and "last mile" fiber installations.

Backed by years of fiber blowing experience, the Mini-Blower/Pusher is designed for the installation of fiber optic cables with diameters from 0.23" (5.8 mm) to 0.50" (12.7 mm) into micro duct 10 mm to 18 mm or traditional duct from 0.50" (12.7 mm) to 2" (50.8 mm).

| Part Number | Description   |
|-------------|---|
| 08780800    | Mini-Blower/Pusher  |
| 08780801    | Mini-Blower/Pusher Job Box with Kit for 12 mm & 12.7 mm   |
|             | duct and includes cable packs 1 & 2 in the Mini-Blower/Pusher cable pack chart on page 109 (08780802, 08780804)   |
| 08780865    | Mini-Blower/Pusher Job Box with Kit for $\frac{3}{4}$ " & $1\frac{1}{4}$ " duct and includes cable packs 1, 2 & 3 in the Mini-Blower/Pusher cable pack chart on page 109 (08780802, 08780804, 08780806) |
| 08780860    | Job Box Only  |

# **Replacement Parts**



See page 109 for Cable Packs and page 104 for Duct Packs.



# **Heavy Duty Tripod**

The Mini-Blower/Pusher mounts easily to the surveyor style tripod, which adds stability and versatility to fiber optic cable installations.

| Part Number | Description       |  |
|-------------|-------------------|--|
| 08780850    | Heavy Duty Tripod |  |
|             |                   |  |

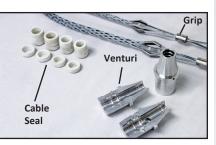






# Cable Packs: Mini-Blower/Pusher

|      | Cable Pack          | Vent           | uri                                  | Cable          | Cable Grips                    |                |                |
|------|---------------------|----------------|--------------------------------------|----------------|--------------------------------|----------------|----------------|
| Pack | Cable<br>OD         | Part<br>Number | Cable<br>OD                          | Part<br>Number | Cable<br>OD                    | Part<br>Number | Part<br>Number |
| 1    | 0.23" - 0.34"       | 08780802       | 0.23" - 0.34"                        | 08780803       | 0.23" - 0.28"<br>(5.8 - 7.2)   | 08780406       | 08643754       |
|      | (5.8 mm - 8.8 mm)   |                | (5.8 - 8.8)                          | 00700003       | 0.29" - 0.34"<br>(7.3 - 8.8)   | 08780407       | 00043734       |
| 2    | 0.35" - 0.48"       |                | 0.35" - 0.48" 08780804 0.35" - 0.48" | 00700005       | 0.35" - 0.42"<br>(8.9 - 10.7)  | 08761424       | 00040755       |
| 2    | (8.9 mm - 12.2 mm)  |                |                                      |                | 0.43" - 0.48"<br>(10.8 - 12.2) | 08761425       | 08643755       |
| 3    | 0.49" - 0.60"       | 08780806       | 0.49" - 0.60"                        | 00700007       | 0.49" - 0.55"<br>(12.3 - 14.0) | 08761426       | 00040750       |
| 3    | (12.3 mm - 15.2 mm) |                | (12.3 - 15.2)                        | 08780807       | 0.56" - 0.60"<br>(14.1 - 15.2) | 08761427       | 08643756       |
| 4    | (10.4 mm x 5.5 mm)  | 08781117       |                                      | Nylatron Ver   | nturi for Flat Fibe            | r Optic Cables |                |
| 5    | (15.2 mm x 6.7 mm)  | 08781118       |                                      | Nylatron Ver   | nturi for Flat Fibe            | r Optic Cables |                |



(See page 104 for Duct Packs)

# Polywater<sup>®</sup> Prelube 5000™

Polywater<sup>®</sup> Prelube 5000<sup>TM</sup> is more concentrated than the Prelube 2000<sup>TM</sup>. It is intended for blowing microcable into small diameter microtubes. The improved chemistry allows this product to spread further and reduce friction levels. The lower viscosity allows practical application into the microtubes.

| Part Number | Description  | Min. Order Qty. |
|-------------|--|-----------------|
| 08230675    | Polywater <sup>®</sup> Prelube 5000 <sup>™</sup> 8 oz Bottle | 6 Bottles       |





# GULFSTREAM<sup>™</sup> 350



(20-Volt DeWalt battery & charger not included with blower)

# Gulfstream<sup>™</sup> 350 Blower

The new Condux Gulfstream 350 Fiber Optic Cable Blower is all pneumatic and comes complete with a convenient storage case. With the ability to install fiber from 0.16" - 0.62" (4 - 16 mm) into duct ranging from 0.50" - 1.25" (8 - 42 mm), the Gulfstream 350 provides a mechanical counter, speed indicator, and maximum belt visibility. Complete the order with cable packs and duct packs on page 120 and 121 to meet the exact job requirements.

# Gulfstream<sup>™</sup> 350 Micro Fiber Blower

| Part Number | Description  |
|-------------|--|
| 08784601    | Gulfstream 350 <sup>™</sup> Pneumatic Blower                 |
| 08784605    | Gulfstream 350E <sup>™</sup> Pneumatic Blower with Recording |
| 02292142    | Work Folding Table (21.7 x 33.5 x 29.7 in)                   |

# **Gulfstream 350 Cable Packs**

| Cable I                           | le Pack Venturi |  | Cable       | Seal             | Cable Grip            |                                   |             |           |  |  |
|-----------------------------------|-----------------|--|-------------|------------------|-----------------------|-----------------------------------|-------------|-----------|--|--|
| Cable OD                          | Part Number     | Cable OD                                 | Part Number | Cable OD         | Part Number           | Cable OD                          | Part Number |           |  |  |
| 0.16" - 0.18"                     | 08781160        | 0.16" - 0.18"                            | 08781165    | 4.0 mm           | 08780960K             | 0.10" - 0.22"                     | 00040750    |           |  |  |
| (4.0 - 4.5 mm)                    | 08781160        | (4.0 - 4.5 mm)                           | 08781165    | 4.5 mm           | 08780961K             | (2.5 - 5.6 mm)                    | 08643753    |           |  |  |
|                                   |                 |  |             | 5.0 mm           | 08780962K             |                                   |             |           |  |  |
|                                   |                 |  |             | 5.5 mm           | 08780963K             |                                   |             |           |  |  |
|                                   |                 |  |             | 6.0 mm           | 08780964K             | 0.10" - 0.22"                     | 08643753    |           |  |  |
| 0.18" - 0.31"<br>(4.6 - 8.0 mm)   | 08781161        | 0.18" - 0.31"<br>(4.6 - 8.0 mm)          | 08781166    | 6.5 mm           | 08780965K             | (2.5 - 5.6 mm)                    |             |           |  |  |
| (                                 |                 | ( · · · · /                              |             | 7.0 mm           | 08780966K             | 0.21" - 0.35"<br>(5.3 - 8.9 mm)   | 08643754    |           |  |  |
|                                   |                 |  |             | 7.5 mm           | 08780967K             |                                   |             |           |  |  |
|                                   |                 |  |             | 8.0 mm           | 08780968K             |                                   |             |           |  |  |
|                                   |                 |  |             | 8.5 mm           | 08780969K             |                                   | 08643755    |           |  |  |
|                                   |                 | 0.32" - 0.47"                            | 08781167    | 9.0 mm           | 08780970K             | 0.32" - 0.48"<br>(8.1 - 12.2 mm)  |             |           |  |  |
|                                   |                 |  |             | 9.5 mm           | 08780971K             |                                   |             |           |  |  |
| 0.32" - 0.47"                     |                 |  |             | 10.0 mm          | 08780972K             |                                   |             |           |  |  |
| (8.1 - 12.0 mm)                   | 08781162        | (8.1 - 12.0 mm)                          |             | 10.5 mm          | 08780973K             |                                   |             |           |  |  |
|                                   |                 |  |             | 11.0 mm          | 08780974K             |                                   |             |           |  |  |
|                                   |                 |  |             | 11.5 mm          | 08780975K             |                                   |             |           |  |  |
|                                   |                 |  |             | 12.0 mm          | 08780976K             |                                   |             |           |  |  |
|                                   |                 |  |             |                  |                       |                                   | 12.5 mm     | 08780977K |  |  |
|                                   |                 |  |             | 13.0 mm          | 08780978K             |                                   |             |           |  |  |
|                                   |                 |  |             | 13.5 mm          | 08780979K             |                                   |             |           |  |  |
| 0.48" - 0.61"<br>(12.1 - 15.5 mm) | 08781163        | 0.48" - 0.61"<br>(12.1 - 15.5 mm)        | 08781168    | 14.0 mm          | 08780980K             | 0.42" - 0.61"<br>(10.7 - 15.5 mm) | 08643756    |           |  |  |
|                                   |                 | , , , , , , , , , , , , , , , , , , ,    |             | 14.5 mm          | 08780981K             | ( ,                               |             |           |  |  |
|                                   |                 |  | 15.0 mm     | 08780982K        |                       |                                   |             |           |  |  |
|                                   |                 |  |             |                  | 15.5 mm               | 08780983K                         |             |           |  |  |
| 0.61" - 0.65"                     | 00701164        | 0.61" - 0.65"                            | 09791160    | 16.0 mm          | 08780984K             | 0.53" - 0.74"                     | 08643757    |           |  |  |
| (15.6 - 16.5 mm)                  | 08781164        | (15.6 - 16.5 mm)                         |             |                  |                       |                                   |             |           |  |  |
| 10.4 x 5.5 mm                     | 08781117        | (Nylatron venturi for flat fiber cables) |             |                  |                       |                                   |             |           |  |  |
| 15.2 x 6.7 mm                     | 08781118        |  |             | (Nylatron ventur | i for flat fiber cabl | es)                               |             |           |  |  |

# **Gulfstream 350 Duct Packs**

| Duct Size OD<br>(MM) | Part Number | Duct Clamp | Duct Seal | End Stop Connector | Duct Size OD<br>(MM) | Part Number | Duct Clamp | Duct Seal | End Stop Connector |
|----------------------|-------------|------------|-----------|--------------------|----------------------|-------------|------------|-----------|--------------------|
| 8                    | 08764160    | 08764162   | 08764163  | 08566336           | 12.7                 | 08764150    | 08764151   | 08764153  | 08566338           |
| 8.5                  | 08764175    | 08764169   | 08764171  | 08566323           | 14                   | 08764120    | 08764122   | 08764123  | 08566328           |
| 10                   | 08764140    | 08764142   | 08764143  | 08566325           | 16                   | 08764130    | 08764132   | 08764133  | 08566329           |
| 12                   | 08764110    | 08764112   | 08764113  | 08566327           | 18                   | 08781110    | 08781106   | 08781101  | 08566334           |



# Gulfstream 350 Duct Packs (continued)

| Duct F                     | Pack           | Duct               | Clamp          | Duct Seal          |                | Carrier                              |                      | Foam Carrier          |                | Cable Grip                |                | Innerduct Eye                       |
|----------------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------------------------|----------------------|-----------------------|----------------|---------------------------|----------------|-------------------------------------|
| Duct Size                  | Part<br>Number | Duct<br>OD<br>(mm) | Part<br>Number | Duct<br>OD<br>(mm) | Part<br>Number | Carrier<br>OD<br>(mm)                | Part<br>Number       | Carrier<br>OD<br>(mm) | Part<br>Number | Duct<br>OD<br>(mm)        | Part<br>Number | Part Number<br>and ID Range<br>(mm) |
| 1/2"<br>SDR 11-13.5        | 08780795       | 0.840"<br>(21.3)   | 08780791       | 0.840"<br>(21.3)   | 08780786       | 0.688"<br>(17.50)                    | 08780793             | 0.75"<br>(19.0)       | 08078300       | .7599"<br>(19-25)         | 08643131       | 08913342<br>.7177"<br>(18-20)       |
| 3/4" (27mm)<br>SDR 11-13.5 | 08780680       | 1.050"<br>(26.6)   | 08780682       | 1.050"<br>(26.6)   | 08780685       | 0.75"<br>(19.0)                      | 08780690             | 0.75"<br>(19.0)       | 08078300       | 1.00-1.24"<br>(25.4-31.5) | 08643137       | 08761840<br>.7187"<br>(18-22)       |
| 1"<br>SDR 11/13.5          | 08780386       | 1.315"<br>(33.4)   | 08780369       | 1.315"<br>(33.4)   | 08780307       | 1.121"<br>(28.5)                     | 08761250             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(32-38)     | 08643143       | 08913343<br>.75-1.00"<br>(19-25)    |
| 1.25"<br>SDR 11/13.5       | 08780392       | 1.660"<br>(42.2)   | 08780375       | 1.660"<br>(42.2)   | 08780051       | 1.414"<br>(35.9)                     | 08761255             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 20mm                       | 08781120       | 0.787"<br>(20.0)   | 08781122       | 0.787"<br>(20.0)   | 08781121       | 0.688"<br>(17.5)                     | 08780793             | 1.00"<br>(25.4)       | 08761444       | .7599"<br>(19.0-25.1)     | 08643131       | 08914007<br>.551813"<br>(14-20)     |
| 22mm                       | 08781153       | 0.886"<br>(22.0)   | 08781154       | 0.886"<br>(22.0)   | 08781155       | 0.688"<br>(17.5)                     | 08780793             | 1.00"<br>(25.4)       | 08761444       | .7599"<br>(19.0-25.1)     | 08643131       | 08914007<br>.551813"<br>(14-20)     |
| 25mm                       | 08780240       | 0.984"<br>(25.0)   | 08780099       | 0.984"<br>(25.0)   | 08780134       | 0.787"<br>(20.0)                     | 08780230             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643137       | 08761840<br>.7187"<br>(18-22)       |
| 32mm                       | 08780385       | 1.260"<br>(32.0)   | 08780368       | 1.260"<br>(32.0)   | 08780306       | 1.063"<br>(27.0)                     | 08761560             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 36mm                       | 08780387       | 1.417"<br>(36.0)   | 08780370       | 1.417"<br>(36.0)   | 08780308       | 1.181"<br>(30.0)<br>1.220"<br>(31.0) | 08761643<br>08761555 | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 37mm                       | 08780388       | 1.457"<br>(37.0)   | 08780371       | 1.457"<br>(37.0)   | 08780309       | 1.220"<br>(31.0)                     | 08761555             | 1.25"<br>(31.8)       | 08761439       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 1.25" TRUE                 | 08780389       | 1.500"<br>(38.1)   | 08780372       | 1.500"<br>(38.1)   | 08780333       | 1.250"<br>(31.7)                     | 08761670             | 1.50"<br>(38.1)       | 08761440       | 1.25-1.49"<br>(31.8-37.8) | 08643143       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 40mm                       | 08780390       | 1.575"<br>(40.0)   | 08780373       | 1.575"<br>(40.0)   | 08780334       | 1.299"<br>(33.0)                     | 08761525             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761842<br>1.06-1.43"<br>(27-37)   |
| 42mm                       | 08780391       | 1.653"<br>(42.0)   | 08780374       | 1.653"<br>(42.0)   | 08780335       | 1.378"<br>(35.0)                     | 08761660             | 1.50"<br>(38.1)       | 08761440       | 1.50-1.99"<br>(38.1-50.5) | 08643149       | 08761844<br>1.37-1.68"<br>(35-43)   |

#### Gulfstream 350 Blower Size

- Dimensions: 606 mm (l) x 341 mm (w) x 299 mm (h)
   23.8" (l) x 13.4" (w) x 11.8" (h)
- Weight: 55 lbs/25 kg

#### Duct Range

- 8 mm 42 mm
- .50" 1.25"

#### Fiber Cable Range

• 4 mm - 16.5 mm (.16" - .65")

#### Features

- Mechanical Counter/Real Time Distance (Meters and Feet)
- Speed Indicator (Meters and Feet)
- No Tools Required for Belt Replacement
- Maximum Belt Visibility, Transparent Covers for Easy Monitoring
- Emergency Stop Button
- Air Conditioning: Filter, Regulator, and Lubricator
- Lightweight Case

#### Drive

- Pneumatic Drive System
- Maximum push force of 310 N (70 lbs)
- Average Speed: 52 m/min @ 178 N (170 ft/min @ 40 lbs)

#### Pressure and Flow

#### Microduct:

- Air Pressure Requirements (BAR)\*: 10-15 Bar
- Air Pressure Requirements (PSI)\*: 150-205 PSI
- Flow Requirements (CMM)\*: 0.5-1.5 CMM
- Flow Requirements (CFM)\*: 10-35 CFM

#### Traditional Duct:

- Air Pressure Requirements (BAR)\*: 7-10 Bar
- Air Pressure Requirements (PSI)\*: 100-150 PSI
- Flow Requirements (CMM)\*: 5-11 CMM
- Flow Requirements (CFM)\*: 185-375 CFM
- \* Air pressure and flow requirements depend on the size of duct and the size of fiber being installed into that duct.





# GULFSTREAM<sup>™</sup> 300

# Gulfstream<sup>™</sup> 300 Micro Fiber Blower

The Gulfstream 300 is an effective and economical approach to middle mile fiber installations. Able to install fiber optic cable ranging in size from 2.5 mm to 8 mm into duct from 7 mm to 18 mm, the Gulfstream 300 offers the portability, convenience and power for standard middle mile projects in a cost effective package. Weighing just 9 lbs. (4.1 kg), the Gulfstream 300 is easily transported and can be mounted on a tripod for optimum productivity.

\*The Gulfstream 300 no longer uses batteries for power. 48v power supply included with kits

# Gulfstream<sup>™</sup> 300 Micro Fiber Blower Kits

| Part Number | Description   |
|-------------|---|
| 08787001    | Gulfstream 300 <sup>™</sup> Micro Fiber Blower Standard Kit, US*    |
| 08787002    | Gulfstream 300 <sup>™</sup> Micro Fiber Blower Standard Kit, Int'l* |
| 08787003    | Gulfstream 300 <sup>™</sup> Micro Fiber Blower Base Kit, US         |
| 08787004    | Gulfstream 300™ Micro Fiber Blower Base Kit, Int'l                  |

## Included in standard kits:

| Part Number | QTY | Description                        |
|-------------|-----|------------------------------------|
| 02290961    | 1   | Plastic Case                       |
| 02291020    | 1   | Hex Key Set                        |
| 08784011    | 1   | Large V-Groove Belt, GS300 QC      |
| 08783076    | 1   | Seal Kit                           |
| 08783519    | 1   | O-Ring Kit (qty 5)                 |
| 08787018    | 1   | Flat Belt, GS300 QC                |
| 08787021    | 1   | Rear Insert Guide (3-4mm)          |
| 08787022    | 1   | Rear Insert Guide (5-7mm)          |
| 08787023    | 1   | Rear Insert Guide (8-10mm)         |
| 08787060    | 1   | AC Power Supply, 48v - US          |
| 08783508    | 1   | AC Power Supply, 48v - Int'l       |
|             |     | (must install appropriate plug)    |
| 08782212    | 1   | Tripod Plate, 5/8" to 1/4" Adapter |
| 02290383    | 1   | Adjustable HD Tripod, 42"- 65"     |
| 08787066    | 1   | Quick Change Tool                  |
|             |     |                                    |

Cable Seals and Duct Packs noted with (\*) on page 113 included in kits

## Included in base kits:

| Part Number | QTY | Description                     |
|-------------|-----|---------------------------------|
| 02290961    | 1   | Plastic Case                    |
| 02291020    | 1   | Hex Key Set                     |
| 08784011    | 1   | Large V-Groove Belt, GS300 QC   |
| 08783076    | 1   | Seal Kit                        |
| 08783519    | 1   | O-Ring Kit (qty 5)              |
| 08787018    | 1   | Flat Belt, GS300 QC             |
| 08787021    | 1   | Rear Insert Guide (3-4 mm)      |
| 08787022    | 1   | Rear Insert Guide (5-7 mm)      |
| 08787023    | 1   | Rear Insert Guide (8-10 mm)     |
| 08787060    | 1   | AC Power Supply, 48v - US       |
| 08783508    | 1   | AC Power Supply, 48v - Int'l    |
|             |     | (must install appropriate plug) |
| 08787066    | 1   | Quick Change Tool               |

Cable Seals, Duct Packs, Tripod and Tripod Plate are sold individually



#### Blower Size

- Dimensions: 11" (I) x 8" (w) x 6" (h)
  - 279 mm (l) x 203 mm (w) x 152 mm (h)
- Weight: 9 lbs/4.1 kg

#### Microduct Range

- 7 18 mm
- Built in clamping system with interchangeable seals

#### Fiber Cable Range

• 2.5 - 8 mm

#### Power System

- Electric drive motor
- 48v AC Power Supply (Plugged into wall or 1000 w Generator)

#### Drive

- Belt drive
- Maximum push force of 30 lbs (133 N)
- Speed: 0-230 fpm (0 70mpm) with 48V inverter

#### Controls

- Forward/reverse switch
- Speed control to regulate motor speed
- Emergency stop button for instant shutdown
- Screen that monitors speed, distance and life counter
- Push force adjustment

#### Pressure and Flow

- Air connections: 3/8" EU or US Coupling
- Air Pressure Requirements (BAR)\*: 10-15 Bar
- Air Pressure Requirements (PSI)\*: 150-205 PSI
- Flow Requirements (CMM)\*: 0.5-1.5 CMM
- Flow Requirements (CFM)\*: 10-35 CFM

\*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.



# GULFSTREAM<sup>™</sup> 300



# Gulfstream<sup>™</sup> 300 Micro Fiber Blower Replacement Parts

## **Replacement Cable Seals**

| Part Number | Description                                 |
|-------------|---|
| 08783792    | 2.5 mm Cable Seal Kit (6 pcs)*              |
| 08783644    | 3.0 mm Cable Seal Kit (6 pcs)*              |
| 08783737    | 3.25 mm Cable Seal Kit (6 pcs)              |
| 08783645    | 3.5 mm Cable Seal Kit (6 pcs)*              |
| 08783739    | 3.75 mm Cable Seal Kit (6 pcs)              |
| 08783646    | 4.0 mm Cable Seal Kit (6 pcs)*              |
| 08783741    | 4.25 mm Cable Seal Kit (6 pcs)              |
| 08783647    | 4.5 mm Cable Seal Kit (6 pcs)*              |
| 08783743    | 4.75 mm Cable Seal Kit (6 pcs)              |
| 08783648    | 5.0 mm Cable Seal Kit (6 pcs)*              |
| 08783649    | 5.5 mm Cable Seal Kit (6 pcs)*              |
| 08783650    | 6.0 mm Cable Seal Kit (6 pcs)*              |
| 08783651    | 6.5 mm Cable Seal Kit (6 pcs)*              |
| 08783652    | 7.0 mm Cable Seal Kit (6 pcs)*              |
| 08783653    | 7.5 mm Cable Seal Kit (6 pcs)*              |
| 08783654    | 8.0 mm Cable Seal Kit (6 pcs)*              |
| 08783655    | 8.5 mm Cable Seal Kit (6 pcs)*              |
| 08783656    | 9.0 mm Cable Seal Kit (6 pcs)*              |
| 08783657    | 9.5 mm Cable Seal Kit (6 pcs)*              |
| 08783658    | 10.0 mm Cable Seal Kit (6 pcs)*             |
| 08783659    | 10.5 mm Cable Seal Kit (6 pcs)*             |
| 08783660    | Cable Seal Kit Blanks (6 pcs)*              |
| 08783666    | Flat Cable Seal Kit 8.1 mm x 4.5 mm (6 pcs) |

\*Included in Gulstream 300 standard blower kit

#### **Replacement Duct Packs**

| Part Number | Description                                      |
|-------------|--|
| 08787035    | 7.0mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08787055    | 8.0mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08787037    | 8.5mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08787038    | 10.0mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08787042    | 12.0mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08787043    | 12.7mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08787028    | 14.0mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08787029    | 16.0mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08787045    | 18.0mm Duct Pack Assembly (includes 10 O-Rings)* |
|             |  |

\*Included in Gulstream 300 standard blower kit

## **Replacement O-Rings**

| Part Number | Description                      |
|-------------|----------------------------------|
| 08783192    | 7.0 mm Duct O-Ring Kit (12 pcs)  |
| 08783193    | 8.0 mm Duct O-Ring Kit (12 pcs)  |
| 08783194    | 8.5 mm Duct O-Ring Kit (12 pcs)  |
| 08783195    | 10.0 mm Duct O-Ring Kit (12 pcs) |
| 08783196    | 12.0 mm Duct O-Ring Kit (12 pcs) |
| 08783197    | 12.7 mm Duct O-Ring Kit (12 pcs) |
| 08783641    | 14.0 mm Duct O-Ring Kit (12 pcs) |
| 08783642    | 16.0 mm Duct O-Ring Kit (12 pcs) |
| 08783643    | 18.0 mm Duct O-Ring Kit (12 pcs) |
|             |                                  |

# Gulfstream<sup>™</sup> 300

## **Micro Fiber Blower Accessories**

| Part Number | Description  |
|-------------|--|
| 02290383    | Adjustable HD Tripod, 42"- 65"                               |
| 08782212    | Tripod Plate, 5/8" to 1/4" Adapter                           |
| 08787060    | AC Power Supply, 48v - US                                    |
| 08783508    | AC Power Supply, 48v - Int'l (must install appropriate plug) |
| 08783392    | GS250/300 Flow Regulator Kit                                 |
| 08783393    | GS250/300 Flow Regulator Kit - Int'l Fittings                |
| 08783301    | GS250/300 Proof/Pressure Test Kit                            |
| 08783878    | Wet Fat Belt with Groove QC (qty 2 req'd)                    |
| 08783670    | 36V DeWalt Battery Assembly Adapter                          |
|             |  |







# FIBER CABLE INSTALLATION



FIBER CABLE INSTALLATION

# Gulfstream<sup>™</sup> 250 Micro Fiber Blower

The Gulfstream 250 is an effective and economical approach to middle mile fiber installations. Able to install fiber optic cable ranging in size from 2.5 mm - 8mm into duct from 5 mm - 18 mm, the Gulfstream 250 offers portability, convenience and power for standard middle projects in a cost effective package. The unit features user-friendly controls that help optimize the fiber optic cable installation process.

\*The Gulfstream 250 no longer uses batteries for power. 48v power supply included with kits

# Gulfstream<sup>™</sup> 250 **Micro Fiber Blower Complete Kit**

| Part Number | Description   |
|-------------|---|
| 08783805-50 | Gulfstream 250 <sup>™</sup> Micro Fiber Blower Standard Kit, US*    |
| 08783805-51 | Gulfstream 250 <sup>™</sup> Micro Fiber Blower Standard Kit, Int'l* |
| 08783805-53 | Gulfstream 250 <sup>™</sup> Micro Fiber Blower Base Kit, US         |
| 08783805-54 | Gulfstream 250 <sup>™</sup> Micro Fiber Blower Base Kit, Int'l      |

#### Included in standard kits:

| Part Number | Description  |  |  |
|-------------|--|--|--|
| 02290961    | Plastic Case   |  |  |
| 02291020    | Hex Key Set  |  |  |
| 08783427    | Large Groove Green Belt                                      |  |  |
| 08783076    | Seal Kit   |  |  |
| 08783519    | O-Ring Kit (qty 5)   |  |  |
| 08783425    | Flat Orange Belt   |  |  |
| 08783770    | Rear Insert Guide (3-4 mm)                                   |  |  |
| 08787771    | Rear Insert Guide (4-7 mm)                                   |  |  |
| 08787772    | Rear Insert Guide (7-10 mm)                                  |  |  |
| 08787060    | AC Power Supply, 48v - US                                    |  |  |
| 08783508    | AC Power Supply, 48v - Int'l (must install appropriate plug) |  |  |
| 08782212    | Tripod Plate, 5/8" to 1/4" Adapter                           |  |  |
| 02290383    | Adjustable HD Tripod, 42"- 65"                               |  |  |
| 08787066    | Quick Change Tool  |  |  |

Cable Seals and Duct Packs noted with (\*) on page 115 included in kits

#### Included in base kits:

| Part Number | Description  |
|-------------|--|
| 02290961    | Plastic Case   |
| 02291020    | Hex Key Set  |
| 08783427    | Large Groove Green Belt                                      |
| 08783076    | Seal Kit   |
| 08783519    | O-Ring Kit (qty 5)   |
| 08783425    | Flat Orange Belt   |
| 08783770    | Rear Insert Guide (3-4 mm)                                   |
| 08787771    | Rear Insert Guide (4-7 mm)                                   |
| 08787772    | Rear Insert Guide (7-10 mm)                                  |
| 08787060    | AC Power Supply, 48v - US                                    |
| 08783508    | AC Power Supply, 48v - Int'l (must install appropriate plug) |
| 08787066    | Quick Change Tool  |

Cable Seals, Duct Packs, Tripod and Tripod Plate are sold individually

# **Specialty Wheels**

2.5 - 4mm 08783819 - Wheel, Specialty Fat, Groove Orange (2 req'd)

**3.5 - 4.3mm** 08783884 - Wet Wheel, Serrated (1 req'd)

**4.4 - 5.5mm** 08783885 - Wet Wheel, Serrated (1 req'd)

5.6 - 7.75mm 08783886 - Wet Wheel, Serrated (1 req'd)

7.75 - 9.75mm 08783887 - Wet Wheel, Serrated (1 req'd)

specialty wheels purchased separately



#### **Blower Size**

- Dimensions: 11" (I) x 8" (w) x 6" (h)
  - 279 mm (l) x 203 mm (w) x 152 mm (h)
- Weight: 9 lbs/4.1 kg

#### **Microduct Range**

- 5 18 mm
- Built in clamping system with interchangeable seals

#### **Fiber Cable Range**

- 2.5 8 mm
- 8.1 9.75 mm (with specialty wheels, not included in kit)

#### **Power System**

- · Electric drive motor
  - 48v AC Power Supply (Plugged into wall or 1000 w Generator)

#### Drive

- Wheel drive
- Maximum push force of 30 lbs (133 N) •
- Speed: 0-230 fpm (0 70 mpm) with 48V inverter

#### Controls

- Forward/reverse switch
- . Speed control to regulate motor speed
- Screen that monitors speed, distance and life counter
- Emergency stop button for instant shut down
- Push force adjustment

#### Pressure and Flow

- Air connections: 3/8" EU or US Coupling
- Air Pressure Requirements (BAR)\*: 10-15 Bar
- Air Pressure Requirements (PSI)\*: 150-205 PSI •
- Flow Requirements (CMM)\*: 0.5-1.5 CMM
- Flow Requirements (CFM)\*: 10-35 CFM •

\*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.

**Fiber Cable Range** 



# **GULFSTREAM™** 250



# Gulfstream<sup>™</sup> 250 Micro Fiber Blower Replacement Parts

## **Replacement Cable Seals**

| Part Number | Description                                 |
|-------------|---|
| 08783792    | 2.5 mm Cable Seal Kit (6 pcs)*              |
| 08783644    | 3.0 mm Cable Seal Kit (6 pcs)*              |
| 08783645    | 3.5 mm Cable Seal Kit (6 pcs)*              |
| 08783646    | 4.0 mm Cable Seal Kit (6 pcs)*              |
| 08783647    | 4.5 mm Cable Seal Kit (6 pcs)*              |
| 08783648    | 5.0 mm Cable Seal Kit (6 pcs)*              |
| 08783649    | 5.5 mm Cable Seal Kit (6 pcs)*              |
| 08783650    | 6.0 mm Cable Seal Kit (6 pcs)*              |
| 08783651    | 6.5 mm Cable Seal Kit (6 pcs)*              |
| 08783652    | 7.0 mm Cable Seal Kit (6 pcs)*              |
| 08783653    | 7.5 mm Cable Seal Kit (6 pcs)*              |
| 08783654    | 8.0 mm Cable Seal Kit (6 pcs)*              |
| 08783660    | Cable Seal Blanks (6 pcs)*                  |
| 08783655    | 8.5 mm Cable Seal Kit (6 pcs)               |
| 08783656    | 9.0 mm Cable Seal Kit (6 pcs)               |
| 08783657    | 9.5 mm Cable Seal Kit (6 pcs)               |
| 08783658    | 10.0 mm Cable Seal Kit (6 pcs)              |
| 08783666    | Flat Cable Seal Kit 8.1 mm x 4.5 mm (6 pcs) |
|             |   |

\*Included in Gulstream 250 standard blower kit

#### **Replacement Duct Packs**

| Part Number | Description                                       |
|-------------|---|
| 08783812    | 5.0 mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08783813    | 6.0 mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08783832    | 7.0 mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08783833    | 8.0 mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08783834    | 8.5 mm Duct Pack Assembly (includes 10 O-Rings)*  |
| 08783634    | 10.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783635    | 12.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783636    | 12.7 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783637    | 14.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783638    | 16.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783639    | 18.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
|             |   |

\*Included in Gulstream 250 standard blower kit

## **Replacement O-Rings**

| 08783190         5.0 mm Duct O-Ring Kit (12 pcs)           08783191         6.0 mm Duct O-Ring Kit (12 pcs)           08783192         7.0 mm Duct O-Ring Kit (12 pcs) | Part Number | Description                      |
|--|-------------|----------------------------------|
| 0 ( 1 )  | 08783190    | 5.0 mm Duct O-Ring Kit (12 pcs)  |
| 08783192 7.0 mm Duct O-Ring Kit (12 pcs)   | 08783191    | 6.0 mm Duct O-Ring Kit (12 pcs)  |
|  | 08783192    | 7.0 mm Duct O-Ring Kit (12 pcs)  |
| 08783193 8.0 mm Duct O-Ring Kit (12 pcs)   | 08783193    | 8.0 mm Duct O-Ring Kit (12 pcs)  |
| 08783194 8.5 mm Duct O-Ring Kit (12 pcs)   | 08783194    | 8.5 mm Duct O-Ring Kit (12 pcs)  |
| 08783195 10.0 mm Duct O-Ring Kit (12 pcs)  | 08783195    | 10.0 mm Duct O-Ring Kit (12 pcs) |
| 08783196 12.0 mm Duct O-Ring Kit (12 pcs)  | 08783196    | 12.0 mm Duct O-Ring Kit (12 pcs) |
| 08783197 12.7 mm Duct O-Ring Kit (12 pcs)  | 08783197    | 12.7 mm Duct O-Ring Kit (12 pcs) |
| 08783641 14.0 mm Duct O-Ring Kit (12 pcs)  | 08783641    | 14.0 mm Duct O-Ring Kit (12 pcs) |
| 08783642 16.0 mm Duct O-Ring Kit (12 pcs)  | 08783642    | 16.0 mm Duct O-Ring Kit (12 pcs) |
| 08783643 18.0 mm Duct O-Ring Kit (12 pcs)  | 08783643    | 18.0 mm Duct O-Ring Kit (12 pcs) |

# Gulfstream<sup>™</sup> 250

## **Micro Fiber Blower Accessories**

| Description  |
|--|
| Adjustable HD Tripod, 42"- 65"                               |
| Tripod Plate, 5/8" to 1/4" Adapter                           |
| AC Power Supply, 48v - US                                    |
| AC Power Supply, 48v - Int'l (must install appropriate plug) |
| 36V DeWalt Battery Assembly Adapter                          |
| GS250/300 Flow Regulator Kit                                 |
| GS250/300 Flow Regulator Kit - Int'l Fittings                |
| GS250/300 Proof/Pressure Test Kit                            |
| Quick Change Tool  |
|  |

For additional wheel options, see 'Specialty Wheels' on page 114









# GULFSTREAM™ 150

## Gulfstream<sup>™</sup> 150 Micro Fiber Blower

The Gulfstream 150 micro fiber blower is designed for FTTx and Enterprise micro fiber cable installation projects. The self-contained Gulfstream 150 combines the push force of a small electric motor driven belt drive with compressed air to quickly and easily install microfiber cables from 1.0 mm to 2.5 mm in diameter into microduct ranging in size from 5 mm to 8.0 mm, at speeds up to 375 feet per minute.

The unit's machined aluminum construction provides a lightweight profile with long life and durability. The Gulfstream 150's compact size and convenient carrying case allow for easy transport between job sites.

\*The Gulfstream 150 no longer includes a battery or charger.

Requirements listed below and must be sourced by installer.

## Gulfstream<sup>™</sup> 150 Micro Fiber Blower Complete Kit

| Part Number | Description   |
|-------------|---|
| 08783400-50 | Gulfstream 150 <sup>™</sup> Micro Fiber Blower Standard Kit, US*    |
| 08783400-51 | Gulfstream 150 <sup>™</sup> Micro Fiber Blower Standard Kit, Int'l* |
| 08783400-53 | Gulfstream 150 <sup>™</sup> Micro Fiber Blower Base Kit, US         |
| 08783400-55 | Gulfstream 150™ Micro Fiber Blower Base Kit, Int'l                  |

## Included in standard kits:

| Part Number | QTY | Description                        |
|-------------|-----|------------------------------------|
| 08783054    | 1   | Plastic Case                       |
| 02291020    | 1   | Hex Key Set                        |
| 08783426    | 2   | Small Groove Wheel                 |
| 08783076    | 1   | Seal Kit                           |
| 08783077    | 1   | O-Ring Kit (qty 5)                 |
| 02290882    | 1   | Adjustable Tripod, 9lbs, 11" - 63" |
| 02291088    | 1   | 3 Pin Cordset                      |
| 08783026    | 1   | Belt Battery Clip                  |
| 08783259    | 1   | Blank Seal Kit (qty 6)             |

Cable Seals and Duct Packs noted with (\*) on page 117 included in kits

#### Included in base kits:

| Part Number | QTY | Description            |
|-------------|-----|------------------------|
| 08783054    | 1   | Plastic Case           |
| 02291020    | 1   | Hex Key Set            |
| 08783426    | 2   | Small Groove Wheel     |
| 08783076    | 1   | Seal Kit               |
| 08783077    | 1   | O-Ring Kit (qty 5)     |
| 02291088    | 1   | 3 Pin Cordset          |
| 08783026    | 1   | Belt Battery Clip      |
| 08783259    | 1   | Blank Seal Kit (qty 6) |
|             |     |                        |

Cable Seals, Duct Packs, and Tripod are sold individually.

## **Battery/Charger Requirements**

DeWalt Li-Ion Battery -12.0v DeWalt Li-Ion Charger 12v/20V

DeWalt Li-Ion Battery - 10.8v DeWalt Li-Ion Charger 10.8v



#### **Blower Size**

- Dimensions: 8" (l) x 6" (w) x 6" (h)
  - 203 mm (l) x 152 mm (w) x 152 mm (h)
- Weight: 7 lbs/3.2 kg

#### Microduct Range

- 5 8 mm
- Built in clamping system with interchangeable seals

#### Fiber Cable Range

• 1 – 2.5 mm

#### **Power System**

- Electric drive motor
- 12v (US) or 10.8v (EU) Cordless Battery (not included)
- AC Power Supply (optional)

#### Drive

- Roller Cover
- Maximum push force of 4.5 lbs (20 N)
- Speed: 0-375 fpm (0 115 mpm)

#### Controls

- Screen that monitors speed and distance life counter
- Forward/Reverse switch
- Speed control to regulate motor speed
- Push force adjustment

#### Pressure and Flow

- Air connections: 1/4" EU or US Coupling
- Air Pressure Requirements (BAR)\*: 10-15 Bar
- Air Pressure Requirements (PSI)\*: 150-205 PSI
- Flow Requirements (CMM)\*: 0.5-1.5 CMM
- Flow Requirements (CFM)\*: 10-35 CFM

\*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.



# GULFSTREAM™ 150



# Gulfstream<sup>™</sup> 150 Micro Fiber Blower Replacement Parts

## **Replacement Cable Seals**

| Part Number | Description                     |
|-------------|---------------------------------|
| 08783448    | 1.25 mm Cable Seal Kit (6 pcs)* |
| 08783449    | 1.50 mm Cable Seal Kit (6 pcs)* |
| 08783450    | 1.75 mm Cable Seal Kit (6 pcs)* |
| 08783451    | 2.00 mm Cable Seal Kit (6 pcs)* |
| 08783452    | 2.25 mm Cable Seal Kit (6 pcs)* |
| 08783453    | 2.50 mm Cable Seal Kit (6 pcs)* |
| 08783259    | Cable Seal Kit Blanks (6 pcs)*  |

\*Included in Gulstream 150 standard blower kit





## **Duct Packs**

| Part Number | Description                                      |
|-------------|--|
| 08783170    | 5.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783171    | 6.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783172    | 7.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
| 08783173    | 8.0 mm Duct Pack Assembly (includes 10 O-Rings)* |
|             |  |

\*Included in Gulstream 150 standard blower kit

#### **Replacement O-Rings**

| Part Number | Description                    |
|-------------|--------------------------------|
| 08783190    | 5.0 mm Duct O-Ring Kit (12 pc) |
| 08783191    | 6.0 mm Duct O-Ring Kit (12 pc) |
| 08783192    | 7.0 mm Duct O-Ring Kit (12 pc) |
| 08783193    | 8.0 mm Duct O-Ring Kit (12 pc) |





## Accessories for Gulfstream<sup>™</sup> 150 Micro Fiber Blower

| Part Number | Description  |
|-------------|--|
| 08783390    | Gulfstream <sup>™</sup> 150 Flow Regulator                 |
| 08783391    | Gulfstream <sup>™</sup> 150 Flow Regulator - Intl Fittings |
| 02290882    | Tripod   |
| 08783090    | AC Power Supply - Int'l (must install appropriate plug)    |
| 08783301    | GS150 Proof/Pressure Test Kit                              |
| 08783085    | A/C Power Supply - US                                      |
| 08783457    | Hose Assembly, Claw to QD GS150 INTL                       |









# CABLE BLOWING LUBRICANTS/CABLE TIPS



## Polywater<sup>°</sup> Prelube 2000<sup>™</sup>

Specially formulated for use with Fiber Optic Cable Blowing Systems, Polywater<sup>®</sup> Prelube 2000<sup>™</sup> has been field proven with Condux Gulfstream Fiber Optic Cable Blowers. This lubricant is a special lubricant used to prelubricate the conduit system before installing the cable. Prelube 2000 is compatible with all types of cable jackets and conduit types.

| Part Number | Description                         | Min. Order Qty.   |
|-------------|-------------------------------------|-------------------|
| 08230600    | 1 Quart (0.9 liter) Standard Grade  | 12 Quarts         |
| 08230601    | 1 Gallon (3.8 liter) Standard Grade | 4 Gallons         |
| 08230605    | 5 Gallon (19 liter) Standard Grade  | 1 Pail (5 Gallon) |

# Polywater<sup>®</sup> W-Prelube 2000<sup>™</sup>

Polywater\* W-Prelube 2000" Winter Grade is a non-freezing form of the standard Polywater Prelube 2000"

| Part Number | Description                       | Min. Order Qty.   |
|-------------|-----------------------------------|-------------------|
| 08230900    | 1 Quart (0.9 liter) Winter Grade  | 12 Quarts         |
| 08230901    | 1 Gallon (3.8 liter) Winter Grade | 4 Gallons         |
| 08230905    | 5 Gallon (19 liter) Winter Grade  | 1 Pail (5 Gallon) |

# Polywater<sup>®</sup> Prelube 5000<sup>™</sup>

Is more concentrated than the Prelube  $2000^{\text{TM}}$ . It is intended for blowing microcable into small diameter microtubes. The improved chemistry allows this product to spread further and lower friction at extremely low coating levels. The lower viscosity allows practical application into the microtubes.

| Part Number | Description                       | Min. Order Qty. |
|-------------|-----------------------------------|-----------------|
| 08230675    | 8-fl ounce (227 g) squeeze bottle | 6 Bottles       |







# **Cable Tips**

These tips screw onto fiber optic cable to assist in guiding the fiber through sharp corners and couplings. Sizes range from 2 - 9 mm in 1/2 mm increments. Note: the actual tip diameter is 1/2 mm larger than cable diameter (ex: the outer diameter of a tip for 4 mm cable (08783978) will measure 4.5 mm).

| Part Number | Description                |
|-------------|----------------------------|
| 08783970    | 2.0 mm Cable Tips (10 pcs) |
| 08783972    | 2.5 mm Cable Tips (10 pcs) |
| 08783974    | 3.0 mm Cable Tips (10 pcs) |
| 08783976    | 3.5 mm Cable Tips (10 pcs) |
| 08783978    | 4.0 mm Cable Tips (10 pcs) |
| 08783980    | 4.5 mm Cable Tips (10 pcs) |
| 08783982    | 5.0 mm Cable Tips (10 pcs) |
| 08783984    | 5.5 mm Cable Tips (10 pcs) |
| 08783986    | 6.0 mm Cable Tips (10 pcs) |
| 08783988    | 6.5 mm Cable Tips (10 pcs) |
| 08783990    | 7.0 mm Cable Tips (10 pcs) |
| 08783992    | 7.5 mm Cable Tips (10 pcs) |
| 08783994    | 8.0 mm Cable Tips (10 pcs) |
| 08783996    | 8.5 mm Cable Tips (10 pcs) |
| 08783998    | 9.0 mm Cable Tips (10 pcs) |



# **PRESSURE TEST KITS/ACCESSORIES**



# FIBER CABLE INSTALLATION

## **Micro Duct Pressure Test Kits**

Use the Micro Duct Pressure Test Kit before setting up the Gulfstream<sup>™</sup> 150/250/300 to pressure test, proof, and lubricate micro duct for optimum performance. For the cable blower to function properly, the microduct system must be able to withstand and hold 100 psi (7 bar). Air leaks will reduce the compressors' ability to maintain the required pressure for cable installation. The duct system must also be passable by a proofing ball of roughly 80% fill ratio so that there are no obstructions prohibiting the installation of fiber optic cable. Lubrication may also be desired to reduce the friction involved when installing fiber optic cable. Achieve maximum performance and installation distances by pressure testing, proofing, and lubricating the microduct with the Condux Micro Duct Pressure Test Kit.

| Part Number | Description  | QTY  | U/M |  |
|-------------|--|------|-----|--|
| 08783302*   | Standard Pressure Test Kit (includes all of the follow | ing) |     |  |
|             |  |      |     |  |
| 02291159    | Tool Box   | 1    | ea  |  |
| 08783304    | Pressure Test Gun                                      | 1    | ea  |  |
| 08230676    | Lubricant, 8oz Bottle                                  | 1    | ea  |  |
| 08783315    | Micro Duct Cutter                                      | 1    | ea  |  |
| 08783354    | Micro Duct Cable Grip Test Kit                         | 1    | ea  |  |
| ****        |  |      |     |  |

\*Must select appropriately sized Micro Duct Kit from any kit listed below

| Part Number | Description  | QTY | U/M |
|-------------|--|-----|-----|
| 08783303    | GS150 Pressure Test Kit (Includes all of the following | g)  |     |
|             |  |     |     |
| 08783316    | 5mm Micro Duct Proof/Press Test Kit                    | 1   | ea  |
| 08783317    | 6mm Micro Duct Proof/Press Test Kit                    | 1   | ea  |
| 08783318    | 7mm Micro Duct Proof/Press Test Kit                    | 1   | ea  |
| 08783319    | 8mm Micro Duct Proof/Press Test Kit                    | 1   | ea  |
| 08783304    | Pressure Test Gun                                      | 1   | ea  |
| 08783315    | Micro Duct Cutter                                      | 1   | ea  |
| 02291159    | Tool Box   | 1   | ea  |
| 08230676    | Lubricant, 8 oz Bottle                                 | 1   | ea  |
| 08783354    | Micro Duct Cable Grip Test Kit                         | 1   | ea  |
|             |  |     |     |



| Part Number | Description                             | QTY | U/M |
|-------------|---|-----|-----|
| 08783301    | GS250/300 Pressure Test Kit             |     |     |
|             | (includes all of the following)         |     |     |
| 08783319    | 8 mm Micro Duct Proof/Press Test Kit    | 1   | ea  |
| 08783320    | 8.5 mm Micro Duct Proof/Press Test Kit  | 1   | ea  |
| 08783315    | Micro Duct Cutter                       | 1   | ea  |
| 08783318    | 7 mm Micro Duct Proof/Press Test Kit    | 1   | ea  |
| 08783321    | 10 mm Micro Duct Proof/Press Test Kit   | 1   | ea  |
| 08783324    | 14 mm Micro Duct Proof/Press Test Kit   | 1   | ea  |
| 08783325    | 16 mm Micro Duct Proof/Press Test Kit   | 1   | ea  |
| 08783322    | 12 mm Micro Duct Proof/Press Test Kit   | 1   | ea  |
| 08783323    | 12.7 mm Micro Duct Proof/Press Test Kit | 1   | ea  |
| 08783326    | 18 mm Micro Duct Proof/Press Test Kit   | 1   | ea  |
| 02291159    | Tool Box                                | 1   | ea  |
| 08783354    | Micro Duct Cable Grip Test Kit          | 1   | ea  |
| 08783304    | Pressure Test Gun                       | 1   | ea  |
| 08230676    | Lubricant, 8 oz Bottle                  | 1   | ea  |
|             |   |     |     |

# **Micro Fiber Carrier Kit**

Designed to attach to the central strength member (CSM) of the cable. The seals are sized to accommodate the proper ID duct size for maximization of the blowing distances and create an airtight seal in the duct.

| Part Number | Description             |
|-------------|-------------------------|
| 08764090    | Micro Fiber Carrier Kit |



## Why an Airtight Duct?

Duct integrity is essential for a successful cable blowing application. Leaks in the duct can lower pressure and greatly reduce installation distances. The duct system must be able to withstand and maintain 100 psi (7 bar) for the cable blower to function properly. Duct integrity should always be tested before attempting cable installation with the cable blower. The duct can be tested with a pressure test kit available from Condux or with the cable blower itself. Either way, an airtight duct system is an absolute necessity for cable blowing.

The main contributors to duct system leaks are the innerduct couplings. Condux recommends using one of the innerduct coupling methods shown on page 121.

# **INNERDUCT COUPLINGS**





Hinged aluminum split coupling for temporarily joining all types of innerduct during a cable blowing process.

Note: Inserts are sold separately.

| Part Number | Description          |
|-------------|----------------------|
| 08676844    | Hinged Coupling Body |

## Inserts

|             |   | Mean Duct | O.D. |
|-------------|---|-----------|------|
| Part Number | Duct Type                                     | (in)      | (mm) |
| 08676859    | 1" SDR 11 & 13.5                              | 1.315     | 33   |
| 08676860    | 1 <sup>1</sup> / <sub>4</sub> " SDR 11 & 13.5 | 1.660     | 42   |
| 08676861    | 1 <sup>1</sup> / <sub>2</sub> " SDR 11 & 13.5 | 1.900     | 48   |
| 08676862    | 2" SDR 11 & 13.5                              | 2.375     | 60   |
| 08676863    | 40 mm   | 1.575     | 40   |

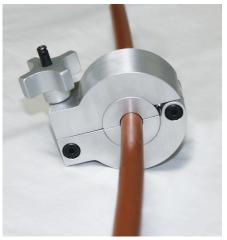
\*Inserts include rubber seal.

# **Replacement Seals**

| Part Number | Size       |  |
|-------------|------------|--|
| 08676853    | 1" Seal    |  |
| 08676854    | 1¼" Seal   |  |
| 08676855    | 11/2" Seal |  |
| 08676856    | 2" Seal    |  |
| 08676857    | 40 mm      |  |

\*Quantities are 10 seals per pack.





# **Reusable Micro Duct Couplers**

The Condux<sup>®</sup> Reusable Micro Duct Coupler allows for the temporary joining of two pieces of microduct - essential when installing fiber optic cable.

These couplers are ideal for routing duct to the blowing machine or creating loops in downstream handholes. Unlike traditional plastic couplers, the hinged assembly can be removed mid-span and reused.

To be more cost effective, the innovative design utilizes a common body that accommodates a wide variety of inserts making the Reusable Micro Duct Coupler the most versatile on the market.

| Part Number | Description                             |
|-------------|---|
| 08783900    | Body                                    |
|             |   |
| 08783910    | Micro Duct Coupler Insert Set - 5.0 mm  |
| 08783911    | Micro Duct Coupler Insert Set - 6.0 mm  |
| 08783912    | Micro Duct Coupler Insert Set - 7.0 mm  |
| 08783913    | Micro Duct Coupler Insert Set - 8.0 mm  |
| 08783914    | Micro Duct Coupler Insert Set - 8.5 mm  |
| 08783915    | Micro Duct Coupler Insert Set - 10.0 mm |
| 08783916    | Micro Duct Coupler Insert Set - 12.0 mm |
| 08783917    | Micro Duct Coupler Insert Set - 12.7 mm |
| 08783918    | Micro Duct Coupler Insert Set - 14.0 mm |
| 08783919    | Micro Duct Coupler Insert Set - 16.0 mm |
| 08783920    | Micro Duct Coupler Insert Set - 18.0 mm |
| 08783921    | Micro Duct Coupler Insert Set - 20.0 mm |



# COUPLERS

Max Pressure: 230 PSI

# **Comfit Couplers**

Comfit is a unique Hi-Tech coupler for HDPE cable ducts. Leak tested at 230 PSI and resistant to corrosion and most chemicals.

Comfit is designed in accordance with the special demands of the leading cable and duct manufacturers, as well as, top utility and contractors.

Comfit is excellent for both blowing and pulling applications.

Comfit has a compact profile reducing difficulties traditionally encountered in manholes, narrow trenches and plowing machines.

| in manneres, na | frow trenches and  |   | inics.   |  |  |
|-----------------|--|---|--|--|--|
| Push the duct e | nds into the coup  | oler for a locke  |  | A C  |  |
|                 | Duct OD  | Coupler OD  | Max Tension  |  |  |
| Nominal OD      | mm/in  | mm/in   | PSI  | Units per Box  |  |
| 3/4"            | 26.6 mm/1.050"   | 43 mm/1.69"   | 580  | 144  |  |
| 1.0"            | 33.4 mm/1.315"   | 56 mm/2.20"   | 580  | 70   |  |
| 11/4"           | 42.2 mm/1.660"   | 72 mm/2.83"   | 1,130  | 56   | (  |
| 11/2"           | 48.3 mm/1.900"   | 82 mm/3.23"   | 1,470  | 36   |  |
| 2.0"            | 60.3 mm/2.375"   | 109 mm/4.29"  | 2,400  | 13   |  |
| 2" Clear Center | 60.3 mm/2.375"   | 109 mm/4.29"  | 2,400  | 13   |  |
| 32 mm           | 32 mm  | 56 mm/2.20"   | 230  | 70   |  |
| 40 mm           | 40 mm  | 70 mm/2.76"   | 230  | 60   |  |
| 50 mm           | 50 mm  | 85 mm/3.35"   | 230  | 33   |  |
|                 | h-fit method en<br>Push the duct e<br>embly. No speci<br>Nominal OD<br>3/4"<br>1.0"<br>1 <sup>1</sup> /4"<br>1 <sup>1</sup> /2"<br>2.0"<br>2" Clear Center<br>32 mm<br>40 mm | h-fit method ensures fast and si<br>Push the duct ends into the coup<br>embly. No special tools are needed<br>$\begin{array}{c c} Duct OD \\ \hline Nominal OD & mm/in \\\hline 3/4" & 26.6 mm/1.050" \\1.0" & 33.4 mm/1.315" \\11/2" & 42.2 mm/1.660" \\11/2" & 48.3 mm/1.900" \\2.0" & 60.3 mm/2.375" \\2" Clear Center & 60.3 mm/2.375" \\32 mm & 32 mm \\40 mm & 40 mm \end{array}$ | a-fit method ensures fast and simple assembly.<br>Push the duct ends into the coupler for a locked<br>embly. No special tools are needed.<br><b>Duct OD Coupler OD</b><br>Nominal OD <b>mm/in mm/in</b><br><sup>3</sup> /4" 26.6 mm/1.050" 43 mm/1.69"<br>1.0" 33.4 mm/1.315" 56 mm/2.20"<br>1½" 42.2 mm/1.660" 72 mm/2.83"<br>1½" 48.3 mm/1.900" 82 mm/3.23"<br>2.0" 60.3 mm/2.375" 109 mm/4.29"<br>2" Clear Center 60.3 mm/2.375" 109 mm/4.29"<br>32 mm 32 mm 56 mm/2.20"<br>40 mm 40 mm 70 mm/2.76" | a-fit method ensures fast and simple assembly and<br>Push the duct ends into the coupler for a locked and<br>embly. No special tools are needed.<br><b>Duct OD Coupler OD Max Tension</b><br>Nominal OD mm/in mm/in PSI<br><sup>3</sup> /4" 26.6 mm/1.050" 43 mm/1.69" 580<br>1.0" 33.4 mm/1.315" 56 mm/2.20" 580<br>1½" 42.2 mm/1.660" 72 mm/2.83" 1,130<br>1½" 48.3 mm/1.900" 82 mm/3.23" 1,470<br>2.0" 60.3 mm/2.375" 109 mm/4.29" 2,400<br>2" Clear Center 60.3 mm/2.375" 109 mm/4.29" 2,400<br>32 mm 32 mm 56 mm/2.20" 230<br>40 mm 40 mm 70 mm/2.76" 230 | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ |

# **Microfit Couplers**

Designed specifically for FTTx applications, the Condux® Microfit Couplers combine ease of use, chemical resistance and ability to accommodate the high pressures encountered when installing fiber with micro-blowing equipment.

The innovative transparent design ensures proper attachment by allowing the installer to visually verify that each end of the duct has been seated properly inside the coupler. Once connected, the air and water tight seal will hold pressure up to 232 PSI (16 Bar) in temperatures ranging from -4°F to 140°F (-20°C to 60°C).

These features incorporated into a push-on, no tools required design, make the Condux<sup>®</sup> Microfit Coupler an essential component of the professional installers toolbox.

| Part Number | Description                           |
|-------------|---------------------------------------|
| 08566310    | Straight Connector - 5 mm Microfit    |
| 08566320    | Endstop Connector - 5 mm Microfit     |
| 08566312    | Straight Connector - 7 mm Microfit    |
| 08566322    | Endstop Connector - 7 mm Microfit     |
| 08566335    | Straight Connector - 8 mm Microfit    |
| 08566336    | Endstop Connector - 8 mm Microfit     |
| 08566313    | Straight Connector - 8.5 mm Microfit  |
| 08566323    | Endstop Connector - 8.5 mm Microfit   |
| 08566315    | Straight Connector - 10 mm Microfit   |
| 08566325    | Endstop Connector - 10 mm Microfit    |
| 08566317    | Straight Connector - 12 mm Microfit   |
| 08566327    | Endstop Connector - 12 mm Microfit    |
| 08566337    | Straight Connector - 12.7 mm Microfit |
| 08566338    | Endstop Connector - 12.7 mm Microfit  |
| 08566318    | Straight Connector - 14 mm Microfit   |
| 08566328    | Endstop Connector - 14 mm Microfit    |
| 08566319    | Straight Connector - 16 mm Microfit   |
| 08566329    | Endstop Connector - 16 mm Microfit    |
| 08566333    | Straight Connector - 18 mm Microfit   |
| 08566334    | Endstop Connector - 18 mm Microfit    |
|             |                                       |

# **Direct Bury Couplers**

Designed specifically for FTTx applications, the Condux® Direct Bury Couplers feature a durable, shock resistant design that will hold up to virtually any terrain or soil condition.

The Direct Bury Coupler's metallic- free construction eliminates damage from oxidation or acidic soil conditions - guaranteeing it will maintain its seal over time. The translucent design ensures a proper connection by allowing the installer to visually verify that each end of the duct has been properly seated.

Once connected, the air and water tight seal will hold pressure up to 232 PSI (16 Bar) in temperatures ranging from -5°F to 113°F (-15°C to 45°C). These parameters will accommodate virtually any application situation encountered in the field - including the high pressures utilized when installing fiber with micro-blowing equipment.

These features incorporated into a push-on, no tools required design, make the Condux® Direct Bury Coupler an essential component of the professional installer's toolbox.



| Part Number | Description                             | 6        |
|-------------|---|----------|
| 08566350    | Direct Bury, Straight Connector - 7 mm  |          |
| 08566351    | Direct Bury, End Stop - 7 mm            |          |
| 08566352    | Direct Bury, Straight Connector - 8 mm  | (/( X // |
| 08566353    | Direct Bury, End Stop - 8 mm            |          |
| 08566354    | Direct Bury, Straight Connector - 10 mm |          |
| 08566355    | Direct Bury, End Stop - 10 mm           | 1 XA     |
| 08566356    | Direct Bury, Straight Connector - 12 mm |          |
| 08566357    | Direct Bury, End Stop - 12 mm           |          |
| 08566358    | Direct Bury, Straight Connector - 14 mm | A A      |
| 08566359    | Direct Bury, End Stop - 14 mm           |          |
| 08566360    | Direct Bury, Straight Connector - 16 mm | 1        |
| 08566361    | Direct Bury, End Stop - 16 mm           |          |
| 08566362    | Direct Bury, Straight Connector - 20 mm | (I)      |
| 08566363    | Direct Bury, End Stop - 20 mm           |          |

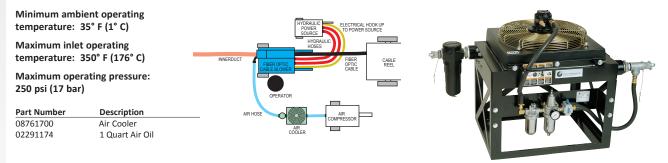
# **AIR COMPRESSORS**

## **Compressed Air Cooler**

Extreme heat can inhibit fiber optic cable installation and damage fiber optic cable and duct. When cable blowing, air is compressed and heat is generated. For example, air that enters a compressor at 100° F (37° C) exits the compressor at 350° F (176° C). At this temperature, fiber optic cable jacket and duct softening can occur. Heat problems can also occur if the duct run is exposed to direct sunlight. The Condux Compressed Air Cooler can help prevent heat damage to fiber optic cable and duct during cable blowing operations.

The Condux Compressed Air Cooler cools compressed air from a maximum temperature of  $350^{\circ}$  F ( $176^{\circ}$  C), to within  $20^{\circ}$  F ( $11^{\circ}$  C) of the ambient temperature. For example, if the ambient temperature is  $100^{\circ}$  F ( $37^{\circ}$  C), air from the air compressor enters the air cooler at  $350^{\circ}$  F ( $176^{\circ}$  C). That air will leave the cooler at approximately  $120^{\circ}$  F ( $49^{\circ}$  C). Cooling the air reduces the chances of heat damage to the cable and duct. The Condux Compressed Air Cooler also removes moisture from the air. Water from humid air can dilute cable blowing lubricant and collect in the duct run.

Use of the Condux Compressed Air Cooler is recommended when ambient air temperatures reach 90° F (32° C) or more and/or the duct is exposed to direct sunlight.



# M17 Air Compressor with Air Cooler

The Mobilair<sup>™</sup> M17 is a rugged and dependable unit that is perfect for a variety of applications. With a folding handle, oversized pneumatic tires, and compact design, this unit is easy to move around virtually any job site.

The M17 features Kaeser's power saving Sigma Profile<sup>™</sup> airend. This efficient Kaeser design maintains steady pressure and puts out more air per hp, saving you gas. Driving these airends is a quiet but powerful Honda engine with modulation control which matches air output to the load demand. It has a simple electric starter with keyed ignition and an easy-to-read control panel.

The scratch, dent, and impact resistant rotomolded polyethylene shell takes a beating and still protects the unit. Inside, the compressors are protected by 4 micron inlet filters rated at 99.9% efficiency, allowing this unit to operate in virtually any construction environment. These units are a custom 35 cfm configuration and include an air cooler.

| Part Number | Description   |
|-------------|---|
| 08785000    | 35 CFM @ 205 PSI (1 m3/min @ 14 bar) - Domestic Fittings      |
| 08785151    | 35 CFM @ 205 PSI (1 m3/min @ 14 bar) - International Fittings |
| 08785050    | 3/8" 50 ft (9.5 mm 15 m) Hose with QDS (Domestic)             |
| 08785051    | 3/8" 50 ft (9.5 mm 15 m) Hose with QDS (International)        |



\*recommended for the Condux Gulfstream™ 150, 250 and 300

| CO    | MPRESSOR   |                | GASOLINE EN                     | IGINE                          |                                       | PAG                      | CKAGE                  | DIMENSIONS  |
|-------|--|----------------|---------------------------------|--------------------------------|---------------------------------------|--------------------------|------------------------|---|
| Model | Free Air<br>Delivery at<br>205 psig<br>(14.13 Bar) | Make           | Power<br>@ Full<br>Load<br>(hp) | Full<br>Load<br>Speed<br>(rpm) | Off Load<br>Running<br>Speed<br>(rpm) | Fuel<br>Tank<br>Capacity | Weight,<br>dry         | L x W x H   |
| M17   | 35 cfm<br>(1 m3/min)                               | Honda<br>GX630 | 20.8<br>(15.51 KW)              | 3300                           | 2200                                  | 5 gal<br>(18.93 L)       | 445 lb.<br>(201.85 kg) | 42 in x 31 in x 31 in<br>(108 cm x 80 cm x 78 cm) |



# HYDRAULIC POWER PACKS

# **Portable Hydraulic Power Packs**

These portable power sources are matched perfectly to the power requirements of the Condux Fiber Optic Cable Puller and the Fiber Optic Cable Blower. See the chart below for specifications of each machine.

| Part Number | Description                          |
|-------------|--------------------------------------|
| 08675255    | 10 HP Hydraulic Power Pack, Electric |
| 08675702    | 13 HP Variable Flow Power Pack       |
| 08675258    | 18 HP Hydraulic Power Pack, Gas      |
| 08675254    | 23 HP Hydraulic Power Pack, Diesel   |

\*Battery and fluids included, packaged separately for shipping



|                                    |                                   |                  |            |                                   |                          |                                   | SPECIFIC                          | ATIONS                  |   |                                |                                  |                       |         |          |         |       |
|------------------------------------|-----------------------------------|------------------|------------|-----------------------------------|--------------------------|-----------------------------------|-----------------------------------|-------------------------|---|--------------------------------|----------------------------------|-----------------------|---------|----------|---------|-------|
| Power Pack<br>Size                 | 1                                 | LO HP Pov        | ver Pack   |                                   |                          | 13 HP Power Pack<br>(recommended) |                                   |                         | 18 HP Power Pack*                       |                                |                                  | 23 HP Power Pack*     |         |          |         |       |
| Part Number                        |                                   | 0867             | 5255       |                                   | 08675702<br>08675702INTL |                                   |                                   | 08675258                |   |                                | 08675254                         |                       |         |          |         |       |
| Hyd. System                        |                                   |                  |            |                                   |                          | Open                              | Center                            |                         |   |                                |                                  |                       |         |          |         |       |
| Frame Type                         | Two Wheel<br>Mobile Unit          |                  |            | Two Wheel<br>Mobile Unit          |                          |                                   | Two Wheeled<br>Mobile Unit        |                         |   | Two Wheel<br>Mobile Unit       |                                  |                       |         |          |         |       |
| Length                             | 27.5" (698 mm)                    |                  |            |                                   |                          | 26.5" (6                          | 73 mm)                            |                         |   | 39" (99                        | 91 mm)                           |                       |         | 39.0" (  | 990 mm) |       |
| Width                              | 24.5" (622.3 mm)                  |                  |            |                                   |                          | 20" (50                           | 8 mm)                             |                         |   | 29" (73                        | 37 mm)                           |                       |         | 28.8" (3 | 731 mm) |       |
| Height                             | 31.5" (800.1 mm)                  |                  |            |                                   | 27.5" (698 mm)           |                                   |                                   |                         | 32" (81                                 | L3 mm)                         |                                  |                       | 36.5" ( | 927 mm)  |         |       |
| Weight (Dry)                       | 200 lbs (90.72 kg)                |                  |            | 143 lbs (65 kg)                   |                          |                                   |                                   | 233 lbs                 | (106 kg)                                |                                | 520 lbs (236 kg)                 |                       |         |          |         |       |
| Filtration                         | 10 Micron Return<br>Line Canister |                  |            | 10 Micron Return<br>Line Canister |                          |                                   | 10 Micron Return<br>Line Canister |                         |   | 10 Micron Return Line Canister |                                  |                       |         |          |         |       |
| Oil Cooler                         | Ai                                | r to Oil wi      | ith Ind. F | an                                | Air to Oil               |                                   |                                   | Air to Oil              |   |                                | Air to Oil                       |                       |         |          |         |       |
|                                    |                                   | Baldor I         | Electric   |                                   | Gas                      |                                   |                                   | Gas                     |   |                                | Diesel                           |                       |         |          |         |       |
| Engine                             |                                   | 10 HP<br>3 Phase |            |                                   | 13 HP Honda<br>GX390     |                                   |                                   | 18 HP                   |   |                                | 23 HP Kohler<br>Tier 4 Compliant |                       |         |          |         |       |
| Fuel                               |                                   | -                |            |                                   | 1                        | L.6 gallons                       | 6.4 liter                         | s                       | 5 gallons/18.9 liters                   |                                |                                  | 5 gallons/18.9 liters |         |          |         |       |
| Hydraulic Oil<br>(Useable)         | 4                                 | gallons/:        | 15.1 liter | s                                 | :                        | 5 gallons/18.9 liters             |                                   | 5.3 gallons/20.1 liters |   | 4 gallons/15.1 liters          |                                  |                       |         |          |         |       |
|                                    | GPM                               | @ PSI            | LPM        | @ BAR                             | GPM                      | @ PSI                             | LPM @                             | BAR                     | GPM                                     | @ PSI                          | LPM (                            | @ BAR                 | GPM     | @ PSI    | LPM (   | @ BAR |
| Hydraulic Rated<br>Flow            | 8.8                               | 0                | 33.3       | 0                                 | 6.8<br>5.9               | 0<br>1,800                        | 25.8<br>22.4                      | 0<br>138                | 11                                      | 0                              | 42                               | 0                     | 12      | 0        | 45.4    | 0     |
|                                    | 8.0                               | 2,000            | 30.2       | 138                               | 8.8<br>8.0               | 0<br>2000                         | 33.3<br>30.2                      | 0<br>138                | 10<br>8                                 | 2,000                          | 38                               | 138                   | 12      | 2,000    | 45.4    | 13    |
| Hydraulic Relief<br>Valve Pressure | 2                                 | 2,100 PSI (      | 145 BAR    | :)                                | :                        | 2,150 PSI                         | (148 BAR                          | )                       | 2,150 PSI (148 BAR) 2,150 PSI (148 BAR) |                                |                                  |                       |         |          |         |       |

\*Special Order

# **Hydraulic Power Pack Accessories**

| Part Number | Description  |
|-------------|--|
| 08675858    | Hydraulic Hose Kit, 20' (6 m) Hose with Couplings        |
| 08780384    | Hydraulic Hose with flow control manifold (GS400)        |
| 02260000    | Hydraulic Coupling, Female Flat Face                     |
|             | Faster 2FFN38-12NPT-F / Bruning FF371-8FP                |
| 02260100    | Hydraulic Coupling, Male Flat Face                       |
|             | Faster 2FFN38-12NPT-M / Bruning FF372-8FP                |
| 02260200    | Dust Cap, Male Coupling                                  |
| 02260201    | Dust Cap, Female Coupling                                |
| 02286416    | Power cord assembly extension, 2-pin straight, 20' (6 m) |
| 08761248    | Power cord with cigarette adapter                        |
|             |  |



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# FIBER OPTIC CABLE PULLER



Hydraulic motor

mounting socket



#### **Standard Features**

**Fiber Optic Cable Puller** 

The Fiber Optic Cable Puller from Condux sets

new

Only

These pullers consist of a hydraulic motor and variable speed foot control. All pullers are calibrated for a maximum pull tension of 600 lbs on a 30" capstan; maximum pull tension can be adjusted using the manually adjustable pressure relief valve.

#### **Optional Features**

The Condux Fiber Optic Cable Puller features an optional electronic tension control system with adjustable digital load limits and a load cell tension measuring device with a paperless recorder and trend display, compact flash drive with 64MB flash card and USB interface (see page 126-127).

WARNING: The Fiber Optic Cable Puller is not to be used as a hoist or for lifting, supporting or transporting people or loads.

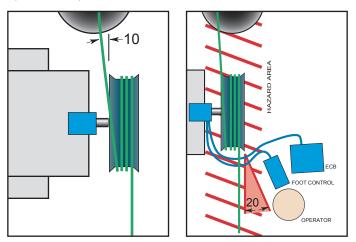


# FIBER OPTIC CABLE PULLER



#### Easy to set up, Safe to use

Condux Fiber Optic Cable Pullers set up easily at a variety of jobsite layouts. Components are modular, adding to versatility and operator safety.



#### **Variable Speed Foot Control**

Like the accelerator pedal in your car or truck, the Variable Speed Foot Control allows the operator to easily manage the speed of the pull.





| Recommended Hydraulic Power Source Specifications |                         |  |  |  |
|---|-------------------------|--|--|--|
| Pressure  | 0-2,000 psi (0-138 bar) |  |  |  |
| Flow  | 0-8 gpm (0-30 lpm)      |  |  |  |
| Peak Power  | 13 HP (9.7 kW)          |  |  |  |

| Fiber Optic Cable Puller Performance |   |       |        |       |        |       |         |       |        |       |
|--------------------------------------|---|-------|--------|-------|--------|-------|---------|-------|--------|-------|
| Capstan Diameter                     | 12 in (305 mm) 30 in (762 mm) 42 in (1,067 mm) 50 in (1,270 mm) 62 in (1,575 mm |       |        |       |        |       | 575 mm) |       |        |       |
| Max. Pulling Force                   | lbs   | Ν     | lbs    | Ν     | lbs    | Ν     | lbs     | N     | lbs    | Ν     |
|                                      | 2,000   | 8,900 | 900    | 4,000 | 600    | 2,670 | 540     | 2,400 | 430    | 1,910 |
| Max. Pulling Speed*                  | ft/min  | m/min | ft/min | m/min | ft/min | m/min | ft/min  | m/min | ft/min | m/min |
|                                      | 98  | 30    | 240    | 74    | 340    | 100   | 410     | 120   | 500    | 150   |

\* At no load and input of 8 gpm (30 lpm)

# FIBER OPTIC CABLE PULLER



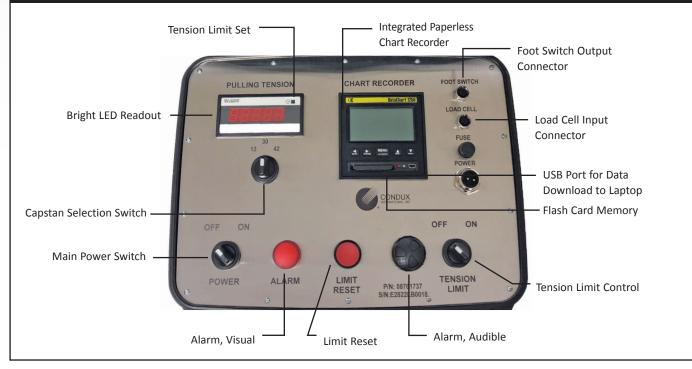
**Electronic Control Box** 

# **Optional Electronic Control System**

Features large LED Display and Paperless Recorder with trend display. Paperless Recorder includes: Trend Display, CompactFlash™ card slot with 256MB Flash Card, and USB interface. A programmable overload set point has both an audible and visual indication of an overload condition. The Electronic Control Box also has the capability to disengage the cable puller if an overload occurs.



# Electronic Controls: Easy, Informational, Durable





# FIBER OPTIC CABLE PULLER PACKAGES



FIBER CABLE INSTALLATION



# **Fiber Optic Cable Pulling Packages**

A complete fiber optic cable pulling jobsite setup requires a Fiber Optic Cable Puller (with foot control and hoses), a capstan, a puller mount, and a hydraulic power source. These components are purchased separately; the options for pullers, capstans, and mounts are listed below. Condux recommends a hydraulic power source capable of up to 8 gpm (30 lpm) and 2000 psi (138 bar) for use with the Fiber Optic Cable Puller (see page 123 for hydraulic power pack listings).

#### Fiber Optic Cable Pullers Dear Deat Number Description

| base Part Number | Description   |
|------------------|---|
| 08690002         | Fiber Optic Puller - Includes Puller, Foot Control and Hoses.                                   |
| Base Part Number | Description   |
| 08690056         | Fiber Optic Puller with ECB - Includes Puller, Foot Control, Hoses, and Electronic Control Box. |

# **Capstans**

For a standard  $2^{7}/_{16}$ " diameter bayonet style shaft.

|             | Dia  | meter | Flat Width |      | Max. Cable O.D. |      | Load Rating |      |
|-------------|------|-------|------------|------|-----------------|------|-------------|------|
| Part Number | (in) | (mm)  | (in)       | (mm) | (in)            | (mm) | (lbs)       | (kN) |
| 08675213*   | 12   | 305   | 9          | 229  | -               | -    | 2,000       | 8.9  |
| 08675230    | 30   | 762   | 4          | 102  | 0.75            | 19   | 1,000       | 4.4  |
| 08675430    | 30   | 762   | 8          | 203  | 0.75            | 19   | 600         | 2.7  |
| 08675436    | 42   | 1,067 | 8          | 203  | 1.05            | 27   | 600         | 2.7  |
| 08675220    | 50   | 1,270 | 8          | 203  | 1.25            | 32   | 600         | 2.7  |
| 08675275    | 62   | 1,575 | 8          | 203  | 1.55            | 39   | 600         | 2.7  |

\* Not to be used for fiber optic cable. Intended for pulling innerduct, power, telephone or coaxial cables.

# **Fiber Optic Cable Puller Mounts**

#### **Remote Mounting Stand**

Allows positioning of the cable puller well away from the power source. Easy to set up, the unit is both sturdy and compact.

| Part Number | Description   |
|-------------|---|
| 08675115    | Remote Mounting Stand                                 |
| 08675282    | Wide Remote Mounting Stand (required for 62" capstan) |

#### Fiber Optic Cable Puller Hitch Mount

The Hitch Mount attaches directly into a typical 2" (51 mm) square Reese-type receiver. An adjustable jack is included for added stability and height adjustment. Pulling loads must not exceed 800 lbs. (3,559 N).

| Part Number | Description   |
|-------------|---|
| 08675908    | Fiber Optic Cable Puller Hitch Mount                  |
| 08675930    | Adjustable Fiber Optic Cable Puller Hitch Mount 22.5° |

#### **Pole Mounting Frame**

A special plug drives into wood poles for added stability. Includes all mounting hardware.

| Part Number | Description                      |
|-------------|----------------------------------|
| 08676000    | Pole Mounting Frame and hardware |

#### **Mounting Sockets**

| Part Number | Description              |
|-------------|--------------------------|
| 02260801    | Floor Socket Mount, cast |
| 08675130    | Base Mount               |
| 08675138    | Side Mount               |

**Remote Mounting Stand** 

12" (305 mm)

Capstan

Fiber Optic Puller Hitch Mount

50" (1,270 mm) Capstan

30" (762 mm)

Capstan



Adjustable Hitch Mount 22.5°



1-Floor Socket Mount 2-Base Mount 3-Side Mount



# FIBER OPTIC CABLE PULLER ACCESSORIES





# Fiber Optic Cable Puller Package **Upgrade Kit**

Part Number Description 08675920 Electronic Control Box Kit - Includes Chart Recorder and Load Cell

# **ECB Replacement Parts**

| Part Number | Description          |
|-------------|----------------------|
| 02286416    | 2 Pin Extension Cord |
| 02290108    | Cord, Footswitch     |
| 08677375    | Cord, Load Cell      |
| 08761248    | Plug, Lighter Cord   |



## **Calibration Dynamometer**

The Condux Fiber Optic Cable Puller is calibrated at the factory prior to shipment. The Calibration Dynamometer is used to check that the puller's calibration has not changed, especially if the relief valve has been adjusted in the field. On cable puller models equipped with an Electronic Control Box, the Calibration Dynamometer simply verifies the readings. Other load capacities available.

| Number   | Description                                |
|----------|--|
| 02261000 | 1,000 lb (454 kg) Calibration Dynamometer  |
| 02261040 | 4,000 lb (1814 kg) Calibration Dynamometer |

# **Fiber Optic Mid-Assist**

The Fiber Optic Mid-Assist is an ideal mid-point cable pulling solution. Portable components set up quickly. Fits in standard 2 1/2" (64 mm) square mounting socket. Capstan and Remote Mounting Stand sold separately (see page 127).

Number Description Remote Mount Mid-Assist 08675975



# **SLIP CLUTCH CAPSTAN**



FIBER CABLE INSTALLATION

# **Slip Clutch Capstan**

Slip Clutch Capstans from Condux are designed to mount directly on a bayonet style winch drive shaft. A factory preset torque limiter prevents pulling tensions from exceeding 600 pounds (2,670 N) ± 10% (60 lbs or 267 N). If the preset load is reached, the capstan will "slip" and discontinue rotating.

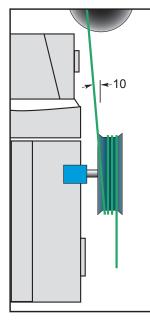
High strength aluminum and steel construction ensures product durability and cable protection.

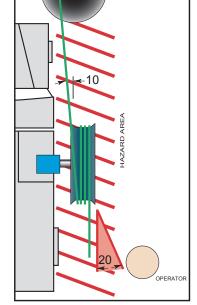
The capstan is designed for use with a  $2^{7}/_{16}$ " (62 mm) diameter, AT&T specification bayonet style power take-off (PTO) shaft.

|             | Diameter |       | Flat Width |      | Max. Cable O.D. |      | Rating |      |
|-------------|----------|-------|------------|------|-----------------|------|--------|------|
| Part Number | (in)     | (mm)  | (in)       | (mm) | (in)            | (mm) | (lbs)  | (N)  |
| 08760030-06 | 30       | 762   | 4          | 102  | .75             | 19   | 600    | 2670 |
| 08760040-06 | 42       | 1,067 | 8          | 203  | 1.05            | 26.7 | 600    | 2670 |
| 08760050-06 | 50       | 1,270 | 8          | 203  | 1.25            | 32.5 | 600    | 2670 |













# FIBER OPTIC CABLE PULLER TRAILER





#### **Complete Fiber Optic Puller Trailer Packages**

Packages include puller, capstan, remote mounting stand, and hydraulic power pack assembled on trailer.

| Part Number | Description                                 |
|-------------|---|
| 08675740    | 30x4 Fiber Optic Puller/Trailer/Capstan Pkg |
| 08675742    | 30x8 Fiber Optic Puller/Trailer/Capstan Pkg |
| 08675744    | 42x8 Fiber Optic Puller/Trailer/Capstan Pkg |
| 08675746    | 50x8 Fiber Optic Puller/Trailer/Capstan Pkg |

# **Open Style Fiber Optic Cable Puller Trailer**

Access job sites with ease using the Condux Open Style Fiber Optic Cable Puller Trailer. The open style has advantages in portability, accessibility and cost.

On the job, gain easy access to all components with the open face design. Small items can be stowed in a lockable storage compartment. Leveling and stabilizing hardware is included. The Open Face Fiber Optic Cable Puller Trailer comes standard with built-in cable puller mounts on the left and right rear corners.

Options include a choice of two Condux Fiber Optic Cable Puller packages, choice of four capstans, a 13 HP (9.7 kW) Power Pack and a Remote Mounting Stand. The trailer bed is designed to accommodate standard and optional equipment with built-in mounting systems for secure travel.

# Build your own Open Style Fiber Optic Cable Puller Trailer Kit

Use the **Base Part Number** shown below and also choose accessory options by part number when placing your order. All items are priced individually.

Base Part Number Description

#### 08675675 Open Style Fiber Optic Cable Pulling Trailer

(Includes: Trailer Flat Assembly, Wheel Chocks and Tool Box) \*Some assembly required

#### Choose one selection from each category:

#### Fiber Optic Cable Puller Options:



(Includes Foot Control and Hoses)
Part Number Description

| innber | Description                                  |
|--------|--|
| 01     | Fiber Optic Cable Puller without Electronics |
| 55     | Fiber Optic Cable Puller with Electronic     |
|        | Control Box and Paperless Chart Recorder     |
|        |  |

#### Capstan Options:

| 2) | Part Number | Description                              |
|----|-------------|--|
| 2) | 08675230    | 30" (762 mm) Capstan; 4" (102 mm) wide   |
|    | 08675430    | 30" (762 mm) Capstan; 8" (203 mm) wide   |
|    | 08675436    | 42" (1,067 mm) Capstan; 8" (203 mm) wide |
|    | 08675220    | 50" (1,270 mm) Capstan; 8" (203 mm) wide |
|    |             |  |

#### **Power Pack Option:**



 Part Number
 Description

 08675702
 13 HP (9.7 kW) Power Pack, Gas

#### Stand Option:



Part NumberDescription08675115Remote Mounting Stand





# FIBER OPTIC CABLE PULLER TRAILER



Accessible storage; all Trailer weighs 800 lbs. components (363 kg) (without options) are easy to see and use 4 Capstan sizes available **Remote Mounting Stand** (detachable) 13 hp (9.7 kW) variable flow

2<sup>1</sup>/<sub>2</sub> inch (64 mm) square mounting socket for use with any Fiber Optic Cable Puller

power pack

| Power Supply   |  |  |  |  |
|--|--|--|--|--|
| HP Honda GX390   |  |  |  |  |
| 13hp @ 3600 rpm<br>11.9 kW @ 3600 rpm                    |  |  |  |  |
| Electric   |  |  |  |  |
| Unleaded Gas, 85 Octane Min,<br>10% or less ehanol blend |  |  |  |  |
| 1.6 gallons (6.4 L)                                      |  |  |  |  |
| Variable   |  |  |  |  |
|  |  |  |  |  |

| Hydraulics                         |  |  |  |  |
|------------------------------------|--|--|--|--|
| Capacity                           | 8.0 gpm @ 2,000 psi<br>(30.2 lpm @ 138 bar)        |  |  |  |
| Reservoir                          | 5.0 gallons (18.9 L)                               |  |  |  |
| Filtration                         | 10 micron return<br>line canister type             |  |  |  |
| Hydraulic Oil<br>Requirements      | petro based, anti-wear, high viscositites over 140 |  |  |  |
| Hydraulic Relief<br>Valve Pressure | 2,150 psi (148.3 bar)                              |  |  |  |

| Stand Al       | one Trailer Specifications      |
|----------------|---------------------------------|
| Weight         | 800 lbs (363 kg)                |
| Axle           | 3,500 lbs (1,590 kg) Type II    |
| Tire           | P205/75R14 Steel Belted Radials |
| Rims           | 14" x 6" (356 mm x 152 mm)      |
| Track          | 60" (1,254 mm)                  |
| Overall Width  | 80" (2,032 mm)                  |
| Overall Height | 48" (1,219 mm)                  |
| Hitch          | 3" (76 mm) Lunette Eye          |
| Lighting       | 7 Pin Connector                 |
| Electronics    | 12 VDC                          |
|                |                                 |

# FIBER OPTIC JAMB SKIDS AND CABLE GUIDES







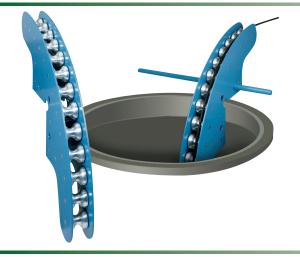


## **Fiber Optic Jamb Skid**

The Condux Fiber Optic Jamb Skid is a device for supporting fiber optic sheaves or quadrant blocks inside a manhole to pull fiber optic cable into underground conduit.

Constructed of steel tubing, the Fiber Optic Jamb Skid is strong, 1,000 lbs. (4,480 N) load rated, and lightweight, can be installed by one person.

|             |   | Manhole | Manhole Height Range |  |
|-------------|---|---------|----------------------|--|
| Part Number | Description                                   | (in)    | (mm)                 |  |
| 08097100    | 46" (1,168 mm) Base Section with locking pins |         |                      |  |
| 08097200    | 43" (1,092 mm) Extension                      | 49–80   | 1,244–2,032          |  |



# **Fiber Optic Quadrant Block**

Protects fiber optic cable during installation. Pulling radius of 26" (660 mm); 13 aluminum rollers on bronze bearings allow cable to make a gradual 90° turn for easy pulling through manhole opening. Lightweight, corrosion-resistant aluminum side plates. Can be lowered into any manhole opening and chained in place for good alignment or used as a cable guide at street level. 2,600 lbs. (11,565 N) cable tension load capacity.  $1^{1}/_{2}$ " (38 mm) maximum cable diameter (consult cable manufacturer for minimum bend radius). Support bar sold separately (see page 96). Replacement Sheaves available.

Part Number 08539350 08539308 Description Quadrant Block Replacement Sheave



# **Hanger Arms**

Allows the hanging of the Fiber Optic Quadrant Block in a manhole for more flexible positioning.

Part Number 08539320 Description Hanger Arm



# **Fiber Optic Hanger Block**

Five aluminum rollers on bronze bearings allow cable to make a gradual 90° turn for easy pulling through manhole opening. Has a pulling radius of 12" (305 mm). Two non-metallic "keeper" rollers to hold the cable in place during the pull. Lightweight corrosion resistant aluminum side plates. Can be suspended in the manhole or hung on an overhead pole for easy pulls.  $\frac{3}{4}$ " (19 mm) maximum cable diameter (consult cable manufacturer for minimum bend radius). 800 lbs. (3,558 N) cable tension load capacity. Replacement Sheaves available.

| Part Number | Description        |
|-------------|--------------------|
| 08539550    | Hanger Block       |
| 08539308    | Replacement Sheave |



# FIBER OPTIC CABLE GUIDES



# **Fiber Optic Sheave Mount**

Fiber Optic Sheave Mounts are an ideal solution to mid-point cable pulling situations. The adjustable sheave mount allows pinpoint adjustment from horizontal to vertical. Portable components set up quickly and adjust from job to job, offering maximum versatility with minimum equipment. Uses a standard  $2^{1}/_{2}$ " (64 mm) square mounting post for use with FO Cable Puller Remote Mounting Stand or Mounting Sockets (see page 127).

# **Fiber Optic Sheave Mount Components**

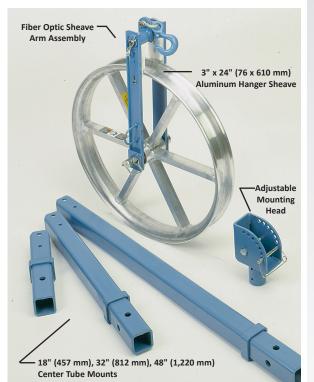
| Part Number | Description                                       |
|-------------|---|
| 08637900    | Adjustable Sheave Mounting Head                   |
|             | (includes sheave mounting shaft & pins)           |
| 08637909    | 18" (457 mm) Center Tube Mount                    |
| 08637910    | 32" (812 mm) Center Tube Mount                    |
| 08637911    | 48" (1,220 mm) Center Tube Mount                  |
| 08637912    | Fiber Optic Sheave Arm Assembly                   |
| 08637743    | Fiber Optic Aluminum Hanger Sheave                |
|             | 3" x 24" (76 x 610 mm)                            |
| 08675115    | Fiber Optic Puller Remote Mounting Stand Assembly |
|             | (See page 127 for details)                        |

# **Fiber Optic Sheave Mount Packages**

| Part Number | Description  |
|-------------|--|
| 08637930    | Adjustable Fiber Optic Sheave Mount, Pkg 1                   |
|             | Includes mounting head, all 3 mounting tubes, sheave and     |
|             | sheave arm assembly.   |
| 08637940    | Adjustable Fiber Optic Sheave Mount, Pkg 2                   |
|             | Includes everything in Pkg 1 except the sheave arm assembly. |

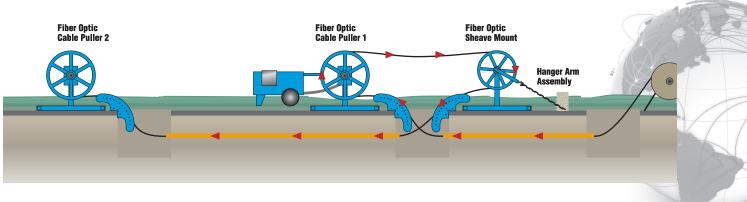






Package 1





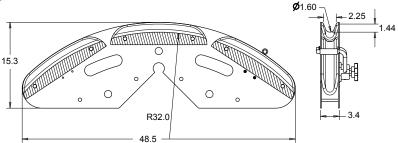


# **UHFC (ULTRA-HIGH FIBER COUNT) CABLE GUIDES**



# 32 Inch Quad Block

Our latest Fiber Optic Quad Block protects high density fiber count cable during installation. Replacing traditional aluminum rollers with three sections of high density nylon provides over 45 contact inches of cable support - significantly reducing the occurrence of micro bends during installation. The 32" (81 cm) pulling radius allows cables up to 1.60" (4.1 cm) to make a gradual 90° turn for stress free pulling. Lightweight, corrosion-resistant aluminum side plates reduce the weight to a very manageable 37 lb (16.8 kg).



| Part Number | Description          | Max Fiber Cable<br>Diameter* | Rated Load    | Length           | Height          | Width         | Weight        |
|-------------|----------------------|------------------------------|---------------|------------------|-----------------|---------------|---------------|
| 08539715    | 32" Fiber Quad Block | 1.6 in/4.1 cm                | 600 lb/272 kg | 48.5 in/123.2 cm | 15.3 in/38.9 cm | 3.4 in/8.6 cm | 37 lb/16.8 kg |

\* Always refer to mfg's specifications for minimum bend radius under tension during installation.



# **36 Inch and 45 Inch Split Sheaves for Fiber Optic Cable**

These larger diameter split sheaves are designed for safe installation of high fiber count cables in multiple applications. High fiber count cables require larger diameter service equipment so to not violate the minimum bend radius of the cable. Split sheaves can be easily carried below the surface in two pieces and then quickly assembled making them among the most versatile on the market and an ideal solution for mid-point installation situations. Available with or without hanger brackets adds even more flexibility to the installation process.

#### **Features:**

- Deep cable races that protect and cradle the cable on the sheave
- Meets minimum bend radius requirements of most fiber optic cables
- Alignment markings and 4 tethered thumb screws make reassembly fast
- Self-lubricating bearings
- Cable retention guide pins

| Part Number | Description                            | Max Fiber Cable<br>Diameter | Sheave Land<br>Width | Sheave<br>Diameter | Weight      | Rated Load    |
|-------------|--|-----------------------------|----------------------|--------------------|-------------|---------------|
| 08637500    | 36" Split Sheave                       | 0.9 in/2.3 cm               | 3.3 in/8.3 cm        | 36 in/91.4 cm      | 31 lb/14 kg | 600 lb/272 kg |
| 08637501    | 36" Split Sheave w/<br>Hanger Brackets | 0.9 in/2.3 cm               | 3.3 in/8.3 cm        | 36 in/91.4 cm      | 59 lb/27 kg | 600 lb/272 kg |
| 08637505    | 45" Split Sheave                       | 1.125 in/2.9 cm             | 3.3 in/8.3 cm        | 45 in/114.3 cm     | 38 lb/17 kg | 600 lb/272 kg |
| 08637506    | 45" Split Sheave w/<br>Hanger Brackets | 1.125 in/2.9 cm             | 3.3 in/8.3 cm        | 45 in/114.3 cm     | 69 lb/31 kg | 600 lb/272 kg |

\* Always refer to mfg's specifications for minimum bend radius under tension during installation.



# **FIBER OPTIC CABLE GUIDES & LUBRICANT**



# **Overhead Fiber Optic Cable Sheave**

Specially designed for guiding fiber optic or CATV cable safely and efficiently, Condux Cable Sheaves feature an innovative hanger arm that eliminates the possibility of cable coming off the sheave or binding against the support arm. With the removal of a pin, the hanger arm separates and allows cable to be slipped in easily, even at midpoints.

24-inch (610 mm) sheave diameter allows for a gentle cable arc. Aluminum sheave construction means durability with less weight. Maximum capacity is 1,500 lbs. (6,672 N). Replacement Sheaves available.

| Part Number | Description                                    |  |
|-------------|--|--|
| 08637825    | 24" (610 mm) Overhead Fiber Optic Cable Sheave |  |
| 08637743    | Replacement Sheave                             |  |

# **Underground Fiber Optic Cable Sheave**

The Underground Fiber Optic Sheave has all the features of the Overhead Sheave (above) but with an additional second arm for convenient tie-off. Replacement Sheaves available.

| Part Number |  |  |
|-------------|--|--|
| 08637800    |  |  |
|             |  |  |
| 08637806    |  |  |
| 08637743    |  |  |

Description Underground Fiber Optic Cable Sheave NOTE: Sheave Size 24" O.D. Replacement Tie-Off Arm Replacement Sheave



## Polywater<sup>®</sup> Lubricant F

Polywater<sup>\*</sup> Lubricant F is a high performance, pourable liquid recommended for long and difficult fiber optic cable pulls. It is slow drying and leaves a lubricating film after its water base evaporates. Polywater F does not stress crack low density polyethylene and is compatible with all types of cable jackets.

| Part Number | Description  | Min. Order Qty. |
|-------------|--|-----------------|
| 08230100    | 1 Quart (.9 liter) Squeeze Bottle                    | 12 Bottles      |
| 08230101    | 1 Gallon (3.8 liter) Jug                             | 4 Jugs          |
| 08230104    | 2 <sup>1</sup> / <sub>2</sub> Gallon (9.5 liter) Jug | 2 Jugs          |
| 08230105    | 5 Gallon (19 liter) Pourable Pail                    | 1 Pail          |
| 08230155    | 55 Gallon (208 liter) Drum                           | 1 Drum          |

## Polywater<sup>®</sup> Lubricant WF

Lubricant WF is a non-freezing form of the standard Lubricant F.

| Part Number | Description  | Min. Order Qty. |
|-------------|--|-----------------|
| 08230201    | 1 Gallon (3.8 liter) Jug                             | 4 Jugs          |
| 08230204    | 2 <sup>1</sup> / <sub>2</sub> Gallon (9.5 liter) Jug | 2 Jugs          |
| 08230205    | 5 Gallon (19 liter) Pourable Pail                    | 1 Pail          |

For Cable Blowing Lubricants, see page 118.







135