

# GF 405/...

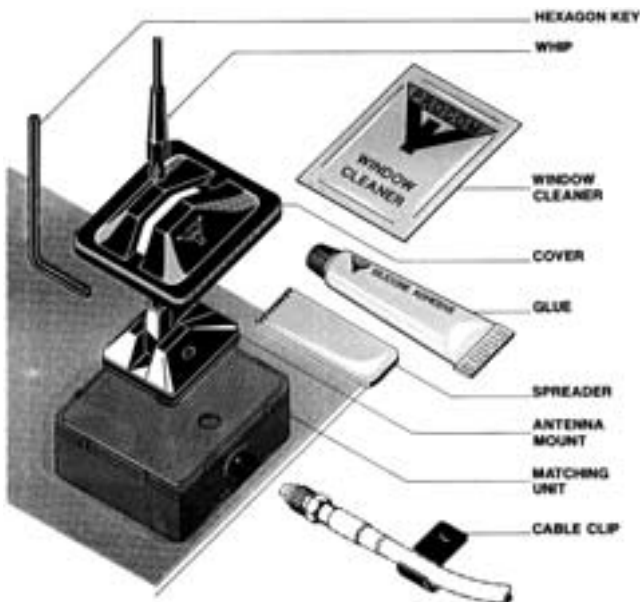
## 0 dB Mobile GlassFix® Antenna for the 450 MHz Band

PROCOM

### DESCRIPTION:

- ★ Shortened half-wave, mobile antenna for the 450 MHz band using the GlassFix® mounting principle.
- ★ Attractive appearance with encapsulated shortening coil.
- ★ Mounting on car window glass – no holes required.
- ★ Double-adhesion procedure ensures fast and reliable fixing.
- ★ Internal matching unit feeds external antenna through window glass.
- ★ Half-wave design – no ground plane required.
- ★ High positioning gives performance equal to conventionally mounted car roof antenna.
- ★ FME FastCabling system (cable to be ordered separately).
- ★ Simple tuning procedure by means of tuning screw on matching unit.
- ★ Easy removable whip for car wash.
- ★ Swivel joint for 180° angle adjustment.
- ★ If removal of antenna installation is necessary, a quick dismantling procedure leaves no trace of the installation.

### ASSEMBLY DETAILS:



### SPECIFICATIONS:

#### ELECTRICAL

|              |  |
|--------------|--|
| ANTENNA TYPE | Shortened 1/2 λ mobile GlassFix® antenna       |
| FREQUENCY    | 450 MHz band covered by three tunable models   |
| IMPEDANCE    | Nom. 50 Ω                                      |
| POLARISATION | Vertical                                       |
| GAIN         | Approx. 0 dB (acc. to EIA RS-329)              |
| BANDWIDTH    | ≥ 10 MHz at SWR ≤ 1.5<br>≥ 18 MHz at SWR ≤ 2.0 |
| SWR          | ≤ 1.3 at f. res.                               |
| MAX. POWER   | 25 watt  |

#### MECHANICAL

|                 |  |
|-----------------|--|
| MATERIALS       | Whip: Stainless steel and brass, black-chromed<br>Mount and indoor unit:<br>Environment-proof plastics<br>Corrosion-safe<br>and corrosion-protected metals |
| CABLE           | FME-cable to be ordered separately   |
| COLOUR          | Black  |
| HEIGHT          | Approx. 24 cm  |
| WEIGHT          | Approx. 30 g   |
| MOUNTING        | On car windows with silicone glue (52 mm x 47 mm<br>obstruction-free mounting area required)   |
| GLASS THICKNESS | 2.5 – 7.0 mm   |

### ORDERING DESIGNATIONS

| TUNING RANGE  | TYPE NO. |
|---------------|----------|
| 380...410 MHz | GF 405/s |
| 406...440 MHz | GF 405/l |
| 430...470 MHz | GF 405/h |

### FME-SYSTEM ACCESSORIES

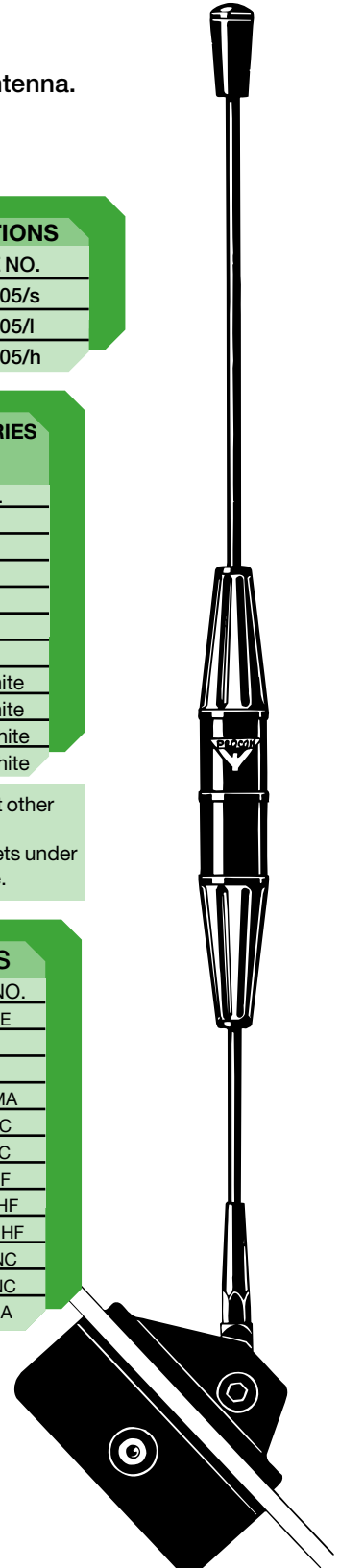
#### FME-CABLES

| LENGTH    | TYPE NO.      |
|-----------|---------------|
| 1m        | 1m FME        |
| 2m        | 2m FME        |
| 3m        | 3m FME        |
| 4m        | 4m FME        |
| 5m        | 5m FME        |
| 6m        | 6m FME        |
| 4m white  | 4m FME-white  |
| 6m white  | 6m FME-white  |
| 12m white | 12m FME-white |
| 18m white | 18m FME-white |

For further information about other types of FME-cables please compare the cable data sheets under accessories in our catalogue.

### FME-CONNECTORS

| CONNECTOR    | ORDER NO. |
|--------------|-----------|
| FME-FME      | FME-FME   |
| Prolongation | FMEP      |
| N            | FME-N     |
| FSMA         | FME-FSMA  |
| BNC          | FME-BNC   |
| TNC          | FME-TNC   |
| UHF          | FME-UHF   |
| Mini-UHF     | FME-MUHF  |
| Elbow-MUHF   | FME-EMUHF |
| Elbow-BNC    | FME-EBNC  |
| Elbow-TNC    | FME-ETNC  |
| SMA          | FME-SMA   |



To select the correct model for a specific CELLULAR network please consult the survey of cellular network frequencies which can be found under USEFUL DATA in our catalogues. This survey also states preferred tuning centre frequencies.

PROCOM A/S reserve the right to amend specifications without prior notice.

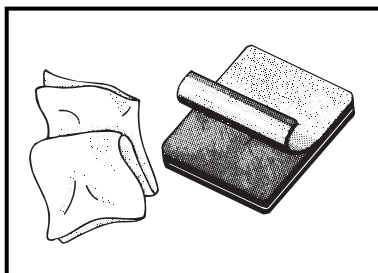
# GF 405/... Installation



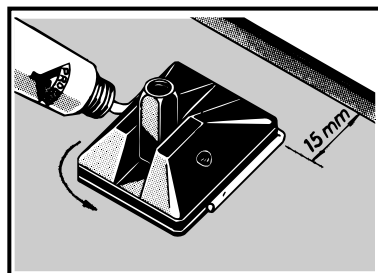
## 1. BEFORE INSTALLATION:

- ★ When selecting mounting location take into consideration: positions of back view mirror, wiper blade paths and defogger wires (when mounting on rear window). The driver's view should not be obstructed.
- ★ Max. allowed curvature of the glass surface on the mounting spot is 2 mm deflection per 100 mm length.
- ★ Environmental- and car temperature must be above 15° C at installation, and surfaces to be glued must be dry and clean.

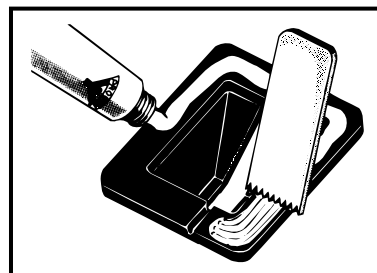
## 2. INSTALLATION:



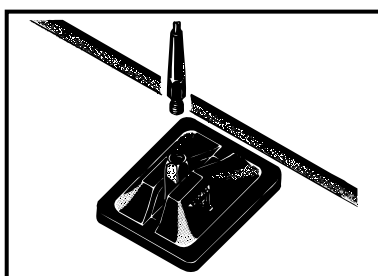
1. Clean both sides of the windscreen, where the antenna mount and the matching unit are to be fitted, and then remove the protective foil from the antenna mount.



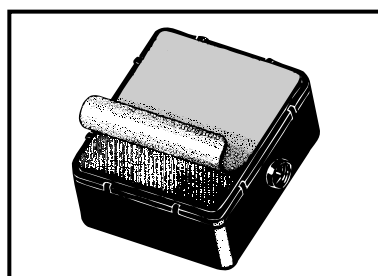
2. Fit mount to screen and press firmly. Apply glue along the edge between mount and glass.



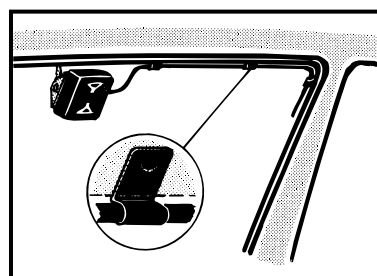
3. Apply glue to the cover.



4. Fit the cover and press down firmly. The antenna whip can now be fitted.



5. Remove the protective foil on the matching unit.



6. Fit matching unit by pressing it firmly into position. Secure cable using clips provided.

## 3. AFTER INSTALLATION:

- ★ Allow the silicone gluing to dry off 2 hours at a temperature above 15° C. To ensure full strength of the glue, it is recommended to keep the whip off the mount for 24 hours.

## 4. TUNING INSTRUCTIONS:

- ★ Insert a forward/reflection-type wattmeter between the transmitter and the antenna.
- ★ Key the transmitter and observe the forward and the reflected power.
- ★ Adjust the tuning screw on the matching unit until minimum returned power is obtained.

## REINSTALLATION KIT:

A reinstallation kit including all necessary parts for transfer of the antenna to another vehicle is available under order No. »GF-RK«.

## WARNING: SAFETY PRECAUTIONS

- ★ Antennas mounted on the windscreen may cause relatively high field strengths in the passenger cabin and near the dashboard.

1. To prevent health hazard due to RF radiation, persons must not be closer than 30 cm to the antenna whip (transmitter output power to the matching unit: 20 watt). (DIN 57 848).
2. The RF signals at the dashboard may cause interference in the car's electronic equipment such as broadcast radio, computer automatics, braking systems, electronic ignition, relays etc. Some cars are more susceptible to disturbances than others.

It is the responsibility of the installer to carry out a thorough check of the proper functioning under any conditions of such circuits before finishing installation.

- ★ The enclosed silicone adhesive contains acetic acid and fungicides. Keep out of reach of children and dispose properly.