



// DIGGALIGN //

OPERATORS & PARTS MANUAL

THANK YOU

Congratulations on the purchase of your new DIGGA product! This product was carefully designed and manufactured to give you years of dependable service. Only minor maintenance (such as visual checking) is required to keep it in top working condition. Be sure to observe all safety precautions and maintenance procedures as described in this manual

Contact your DIGGA dealer for any further information pertaining to this product or for further information on other products available in the DIGGA range.

ABOUT THIS MANUAL

This manual has been designed to help you do a better, safer job. Read this manual carefully and become familiar with its contents. Remember; never let anyone operate this unit without reading the “Operating Instructions” sections of this manual. (See Section 4.)Unless noted otherwise, right and left sides are determined from the position of the machine operator when behind the product facing forward.

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3 SERVICE & PREPARATION

Your Diggalign System is a user non serviceable part. Unauthorised disassembly will void warranty. All service and warranty must be performed by an authorised DIGGA service agent. Contact your local Digga dealer for details. To facilitate warranty or service, record the model and serial number of your unit in the space provided on this page. This information may be obtained from the identification plate located on the product.

MODEL_____

SERIAL NUMBER_____

DATE PURCHASED_____

IMPORTANT: WHEN SERVICING OR ASSEMBLING YOUR PRODUCT, REMEMBER TO USE ONLY GENUINE DIGGA REPLACEMENT PARTS. SUBSTITUTE PARTS MAY NOT MEET THE STANDARDS REQUIRED FOR SAFE, DEPENDABLE OPERATION. USE OF NON GENUINE DIGGA PARTS WILL VOID WARRANTY AND DIGGA WILL ACCEPT NO LIABILITY WHAT SO EVER FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

4 OPERATING AND INSTALLATION INSTRUCTIONS

This Diggalign system has been designed to indicate when the drilling attachment is vertical (plumb). When this is accomplished, all the LED lights will go out on the panel except the large centre LED light (green) indicating that the drilling operation is ready to be carried out.

During the drilling operation, different hardnesses of terrain may be encountered. This can cause the auger to drill at an angle other than vertical. In this case the Diggalign System will alert the operator by illuminating the yellow LED lights, allowing the operator to return the auger to a vertical and plumb position. Once the operator corrects this condition, the yellow LED lights go out and the green centre LED will illuminate again.

Using a **High definition** kit (mainly for screw pier installation), when starting an 8m screw pile, 50mm (0.5°) off plumb will cause the first set of amber LED lights to illuminate. The LED light will indicate the direction of the out of plumb condition. Each ring of LED lights constitute 0.5° off plumb.

Using a **Standard definition** kit (mainly for general augering up to 6m above the ground), if the auger was 6m above the ground 210mm (2.0°) off plumb will make the first set of amber LED lights illuminate (closest to the green centre plumb LED light). In other words 2.0° off plumb will cause the first row of LED lights to illuminate. The LED light will indicate the direction of the out of plumb condition. Each ring of LED lights constitute 2.0° off plumb.

Both Diggalign kits will cover a maximum of 20° off plumb in any of the 4 planes.

IMPORTANT: If any welding work is to be performed on either the parent machine or any connected attachments similarly in the event of an electrical storm the Diggalign System must be electrically isolated (remove the cigarette lighter plug from the power point).

It is recommended that you disconnect the Diggalign cigarette plug when ever the machine is left exposed to the elements ie; in case of an overnight electrical storm.

Do not use a high pressure water cleaner inside the hood of the drive unit as this will damage the unit and void any warranty.

***NOTE: THIS SYSTEM USES A 12V/24V DC SUPPLY**

The **Complete Diggalign Kit** comprises the following parts:

- Cab mounted Diggalign LED display box complete with 12V/24v plug (cigarette lighter fitting incorporating a 10A fuse screwed into the front of the plug) (See photo 2). The LED display box can be mounted anywhere in the cab of the machine convenient for operator viewing
- 4 x M6x 25mm socket head set screws Part N°. FA-000141
- 4 x zinc plated ¼" flat washers Part No. WA-000002
- Inclinometer unit, hard-wired to a 3.5m harness which terminates with a Deutsch Plug. Part N°. DT-000007 (Standard definition) or DT-000029 (High definition) The inclinometer sensor mounts inside the hood (See Illustration 2, page 15)
- P-Clamp Part N°. HA-000706
- Either a 15m ,12m ,6m or 3m extension harness terminated with a Deutsch Plug at each end (This is dependent on the size of the machine)
- An inclinometer sensor mounting plate. Part N°. DT-000012
- Operator and Parts Manual - PM-000041
- 1 X Rubber Gasket Part N° DT-000059

4 OPERATING AND INSTALLATION INSTRUCTIONS

*** NOTE: The correct installation of the mounting plate inside the hood is important for accurate sensing and operation of the Diggalign System. Please refer to Illustration 1 and 2 for mounting details**

Connection of WIRING HARNESS for the Diggalign System

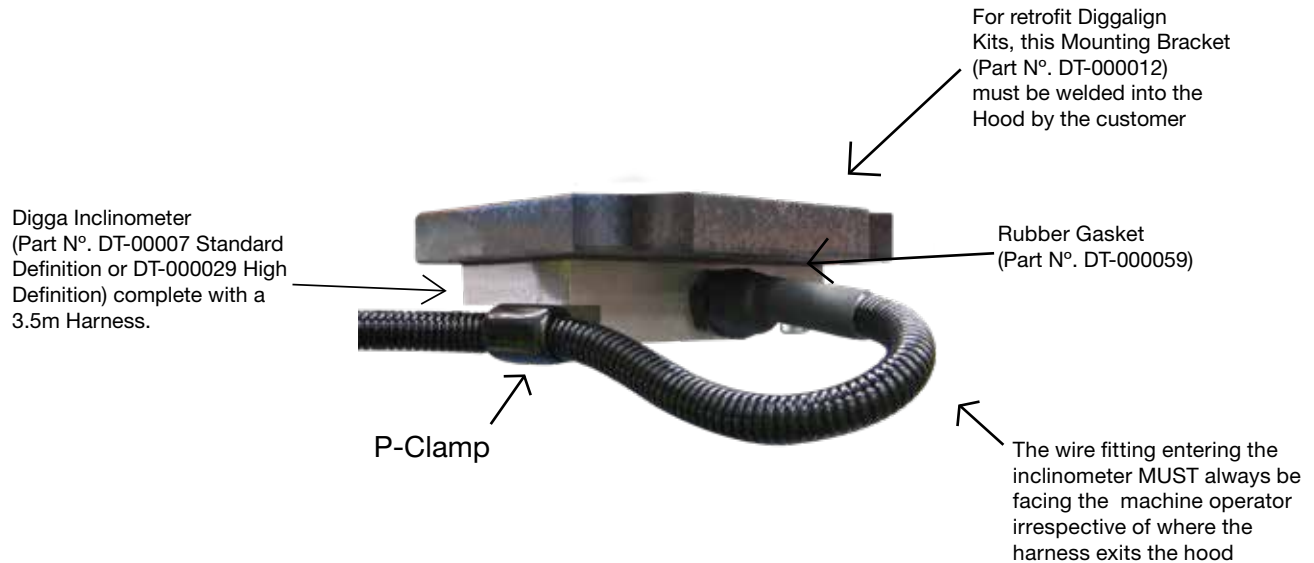
- Mount the LED display box in a location close to a 12V/24V cigarette lighter socket point
- Plug the one lead from the LED display box (which has the square Deutsch plug) into either the 15m, 12m, 6m or 3m extension harness (See photo 2). Harness length is dependent on the size of the machine
- The extension harness is to be mounted on the boom of an excavator and can be fastened to the hydraulic hoses using cable ties
- The mounting plate for the inclinometer sensor must be welded inside the hood of the drive unit. (See photo 1 & Illustration 2)
- The inclinometer unit must be mounted in the hood so that the harness entering the inclinometer faces directly towards the machine operator (not 90° or 180°) as shown in the attached (photo 1 & Illustration 2) otherwise the X & Y LED Reading will be incorrect
- Connect the plug on the inclinometer harness to the extension harness which is mounted on the beam.

4 OPERATING AND INSTALLATION INSTRUCTIONS

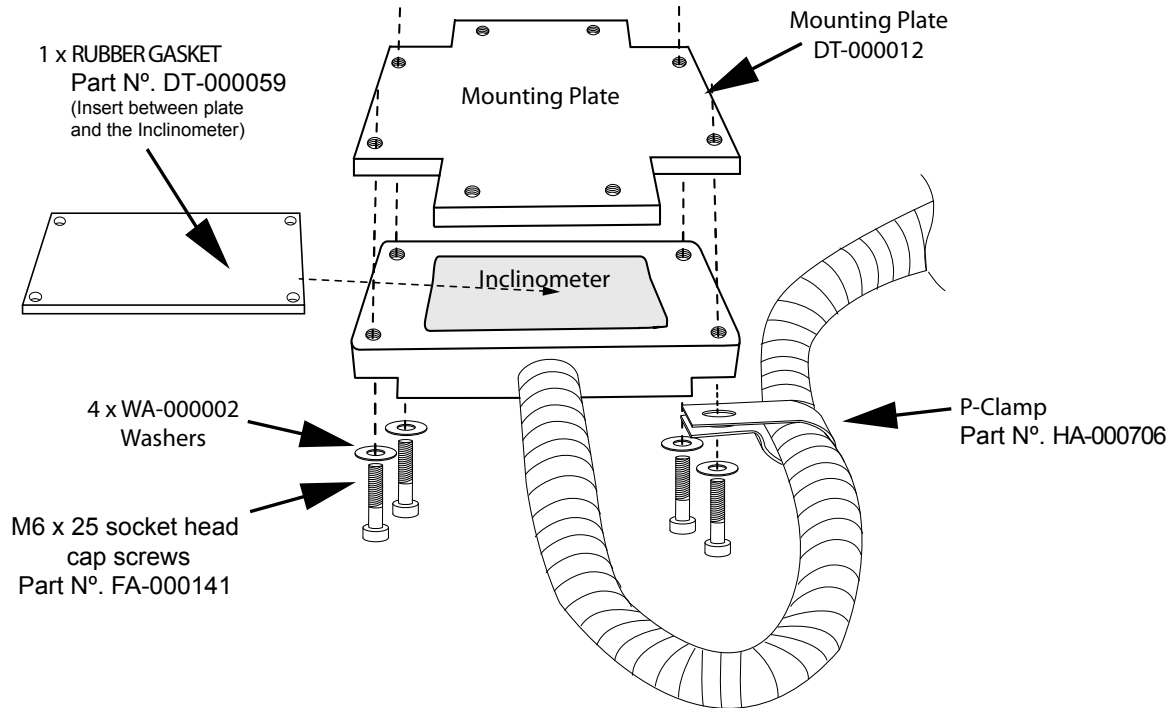
- Once the drive unit is initially setup and is plumb (using a spirit level), plug the cigarette lighter plug (on the LED display unit) into the 12V/24V supply. The light on the back of the plug will illuminate showing that there is power going to the LED display box. If the light at the back of the plug does not illuminate, check the 5A fuse in the front of the plug
- If the inclinometer is correctly installed into the hood and the drilling unit is plumb, the LED display box should illuminate the centre green LED indicating that the sensor is calibrated to the drive unit
- If the drive unit is plumb (perpendicular to ground) yet the digital display unit is not reading accordingly, press & hold the black button for 3 seconds (on the left side of digital display box). this will calibrate the inclinometer to that of the drive unit.
- The Diggalign unit is capable of operating up to 20° off plumb. Should an operator require holes to be bored at an angle other than vertical, set the auger drive to the required angle using a spirit level or laser level, then press & hold the Calibration button for 3 seconds, this will calibrate the Diggalign unit to that of the drive unit.

4 OPERATING AND INSTALLATION INSTRUCTIONS - PHOTO 1

Different Machines will mount the gearbox so that this edge of the mounting bracket will have to be mounted inside the Hood, either parallel or 90° to the direction of the Ears on the top of the Hood Mount. *Check carefully before welding into place.



4 OPERATING AND INSTALLATION INSTRUCTIONS - ILLUSTRATION 1



4 OPERATING AND INSTALLATION INSTRUCTIONS - PHOTO 2

Digital Display Unit and Harness



4 OPERATING AND INSTALLATION INSTRUCTIONS - PHOTO 3

Digital Display Unit - Standard Definition - 2° Increments



PART N° DT - 000008

4 OPERATING AND INSTALLATION INSTRUCTIONS - PHOTO 4

Digital Display Unit - High Definition - 0.5° Increments

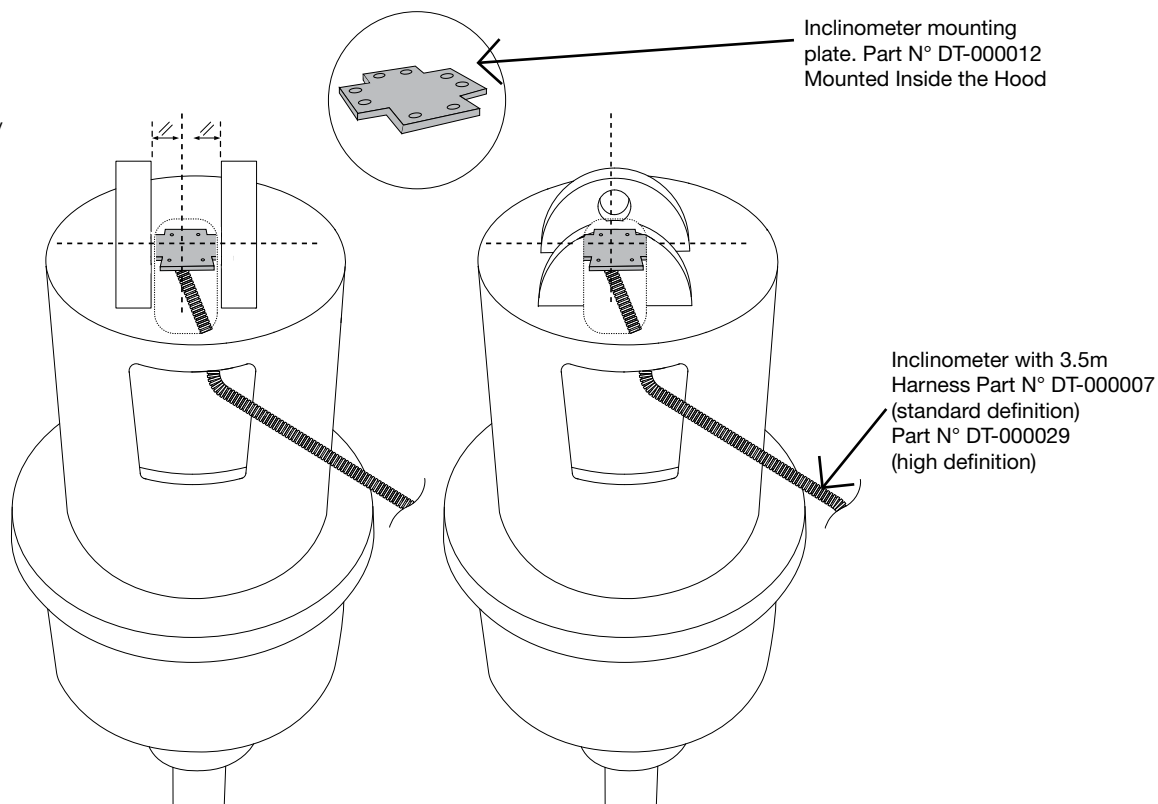


PART N° DT - 000028

4 OPERATING AND INSTALLATION INSTRUCTIONS - ILLUSTRATION 2

For most installations the inclinometer mounting plate must be mounted inside the lid of the hood between the ears, parallel/ square to the ears.

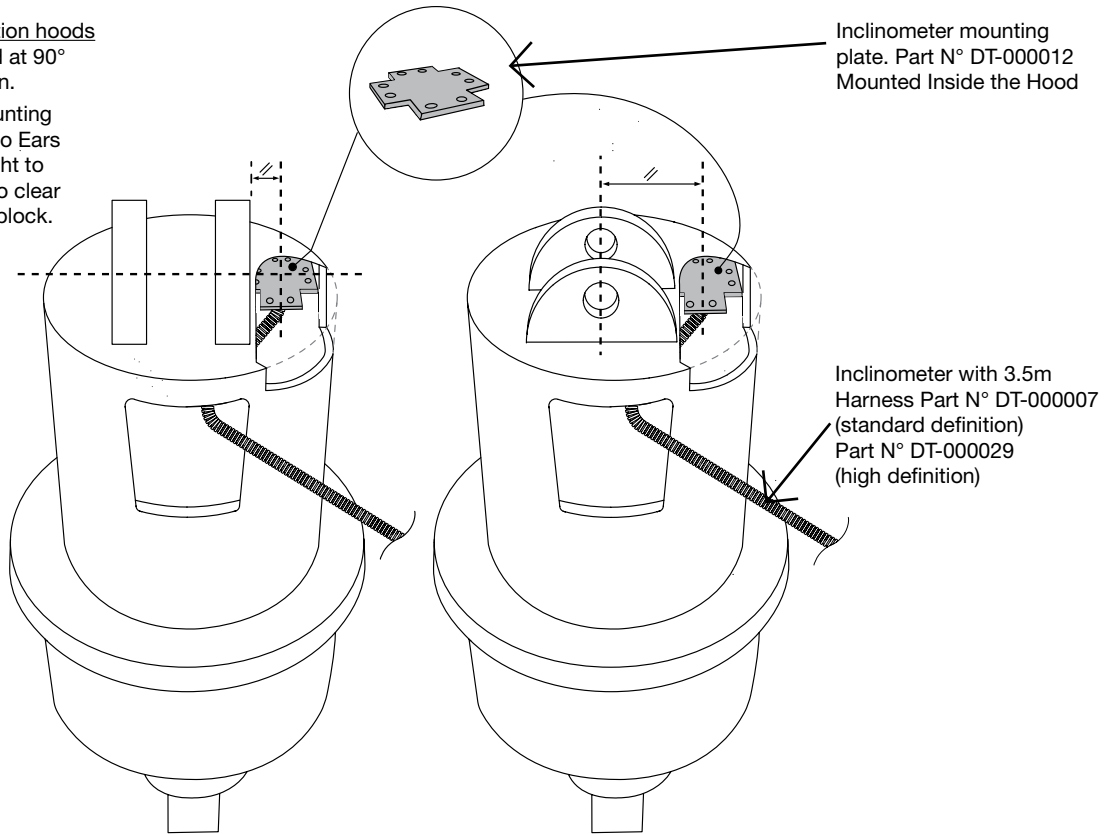
NOTE. Check that the mounting plate plus inclinometer will clear the hydraulic motor & valve assembly prior to installation.



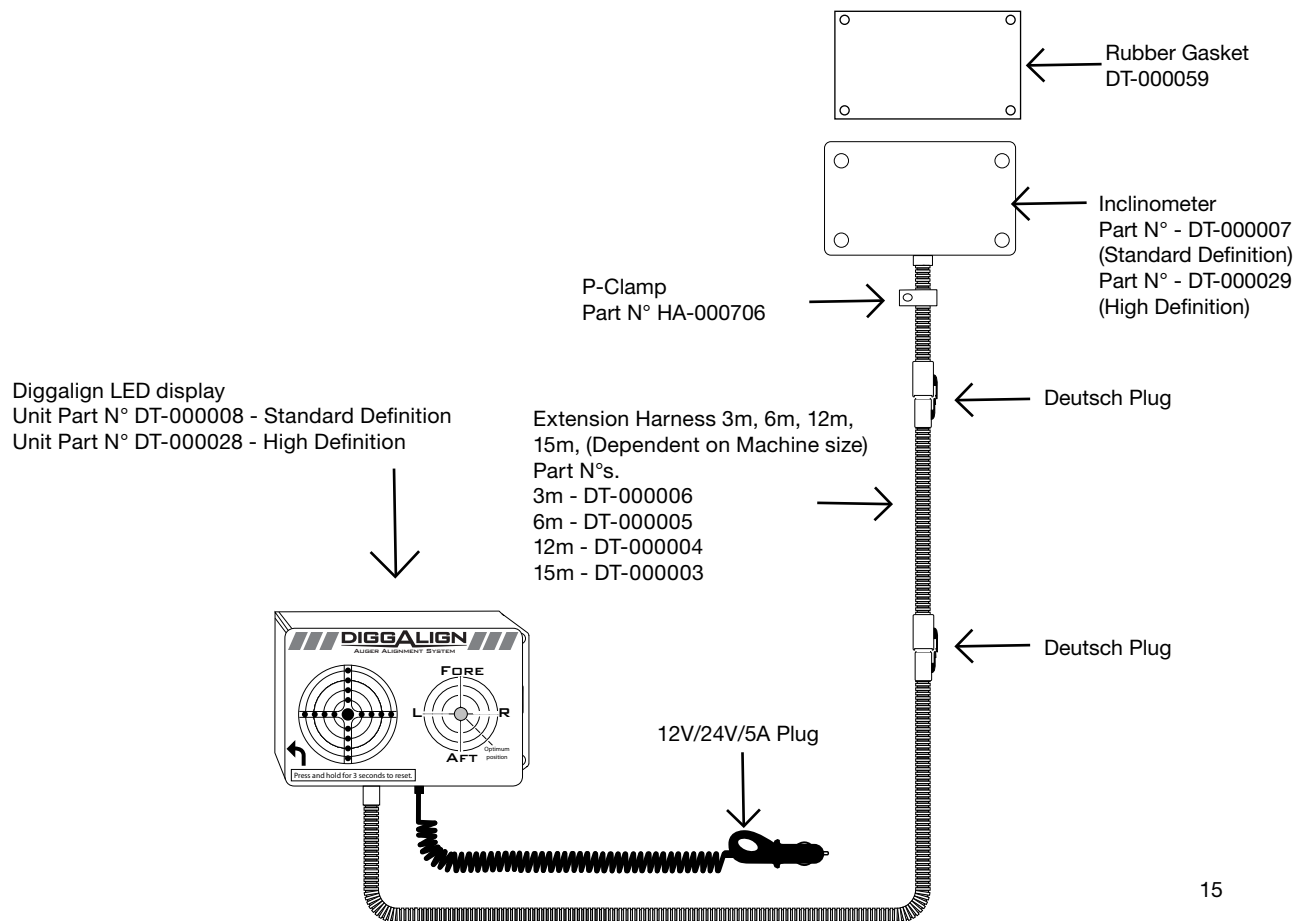
4 OPERATING AND INSTALLATION INSTRUCTIONS - ILLUSTRATION 3

*Some special application hoods have the Ears mounted at 90° to the standard position.

Center lines of the mounting plate must be parallel to Ears and mounted to the right to access hood in order to clear the hydraulic and valve block.



4 OPERATING AND INSTALLATION INSTRUCTIONS - ILLUSTRATION 4



5 SPARE PARTS LIST

Part Number	Description
DT-000001	Diggalign Kit - High Definition c/w 15m Extension Harness
DT-000030	Diggalign Kit - High Definition c/w 12m Extension Harness
DT-000031	Diggalign Kit - High Definition c/w 6m Extension Harness
DT-000032	Diggalign Kit - High Definition c/w 3m Extension Harness
DT-000002	Diggalign Kit - Standard Definition c/w 15m Extension Harness
DT-000033	Diggalign Kit - Standard Definition c/w 12m Extension Harness
DT-000034	Diggalign Kit - Standard Definition c/w 6m Extension Harness
DT-000035	Diggalign Kit - Standard Definition c/w 3m Extension Harness
DT-000052	Diggalign Retro Fit Kit - High Definition c/w 15m Extension Harness
DT-000053	Diggalign Retro Fit Kit - High Definition c/w 12m Extension Harness
DT-000054	Diggalign Retro Fit Kit - High Definition c/w 6m Extension Harness
DT-000055	Diggalign Retro Fit Kit - High Definition c/w 3m Extension Harness
DT-000048	Diggalign Retro Fit Kit - Standard Definition c/w 15m Extension Harness
DT-000049	Diggalign Retro Fit Kit - Standard Definition c/w 12m Extension Harness
DT-000050	Diggalign Retro Fit Kit - Standard Definition c/w 6m Extension Harness
DT-000051	Diggalign Retro Fit Kit - Standard Definition c/w 3m Extension Harness

5 SPARE PARTS LIST

Part Number	Description
DT-000003	15m Extension Harness
DT-000004	12m Extension Harness
DT-000005	6m Extension Harness
DT-000006	3m Extension Harness
DT-000007	Inclinometer (Standard Definition)
DT-000008	Digital Display Unit - Standard Definition
DT-000012	Mounting Plate - Inclinometer
DT-000028	Digital Display Unit - High Definition
DT-000029	Inclinometer (High Definition)
FA-000141	M6 x 25 Long Socket Head Screws
WA-000002	¼" Flat Washer Zinc Plated
HA-000706	P-Clamp
DT-000059	Rubber Gasket

5 SPARE PARTS

For further information on spare parts please contact one of the Digga sales office below your closest authorised Digga Dealer.

DIGGA INTERNATIONAL SALES OFFICES

ASIAPACIFIC

DIGGA HEAD OFFICE - BRISBANE

4 Octal St, Yatala QLD 4207

PH: 1300 234 442

FAX: (07) 3807 1499

EMAIL: info@digga.com

DIGGA NEW SOUTH WALES

20 McKay Close,
Whetherill Park NSW 2164

PH: 1300 234 442

FAX: (02) 4647 1433

EMAIL: nsw@digga.com

DIGGA VICTORIA

27 Metcalf Street
South Dandenong, VIC 3175

PH: (03) 9706 6171

FAX: (03) 9706 6164

EMAIL: vic@digga.com

WEB: www.digga.com

NORTH AMERICA

DIGGA NORTH AMERICA

2325 Industrial Parkway SW
Dyersville IOWA 52040

PH: + 1 (563) 875 7915

WEB: www.diggausa.com

EMAIL: info@diggaus.com

EUROPE

DIGGA EUROPE

Unit 6, Smitham Bridge Road
Hungerford Trading Estate,
Hungerford, Berkshire RG17 0QU
England, United Kingdom

PH: +44 (0) 1488 688 550

WEB: www.diggaurope.com

EMAIL: info@diggauk.com

WARRANTY

All new Digga products are warranted to be free from defects in materials or workmanship, for a period of twelve (12) months from date of original purchase which may cause failure under normal usage and service when used for the purpose intended.

In the event of failure within twelve (12) months from initial retail sale, lease or rental date (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads & broom bristles), if after examination, Digga determines failure was due to defective material and/or workmanship, parts only will be repaired or replaced. Digga may request defective product or products be returned prepaid to them for inspection at their place of business at 4 Octal Street Yatala, Queensland, or to a location specified by Digga. Any goods returned to Digga by the customer under warranty or repair must have all freight charges prepaid for on the customers account.

The warranty will be considered void if the product or any part of the product is modified or repaired in any way not expressly authorized by Digga, or if closed components are disassembled prior to return. Closed components include, but are not limited to: gearboxes, hydraulic pumps, motors, cylinders and actuators. Any claims under this warranty must be made within fifteen (15) days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by Digga outside the time period specified above shall be deemed waived.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL DIGGA BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGE.

DIGGA'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING DIGGA'S NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF DIGGA, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.

