

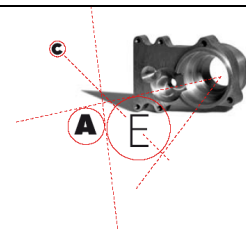
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepperformance.com.au



RP-PWR-HQ-WB

Serial no:

DATE:



HQ-WB HOLDEN 'RACK-IT' POWER STEERING RACK INSTRUCTIONS

Important Information:

The purchase of this kit includes an Engineer's Compliance Certificate. In order to prevent fraudulent activity, a copy of this document will be accessible through a Registered Engineer. Please have your engineer phone or email us to supply an Engineer's Compliance Certificate.

Note: CAE Performance Products recommends fitment of this product be installed by qualified mechanic/personnel.

Substituted parts will void compliance and warranty.

Kit Contents:

1 x HQ PWR Rack assembly P/N RP-PWR-HQ (Assembled with tie-rods) P/N TE8274R, TE8275L	1 x Steering Uni $\frac{3}{4}$ DD-17mm P/N- ST-UNI-07
1 x HQ Rack mount P/N- CAE-522	1 x Heim joint P/N- ST-SUPPORT-3/4
1 x HQ Proportion valve bracket P/N-CAE-522A	2 x Steering DD shaft rods P/N-ST-UNI-DD *Cut to Length*
1 x Steering column uni P/N-ST-UNI-06	1 x Steering uni $\frac{3}{4}$ DD P/N-ST-UNI-08
Assortment of grade 5 bolts and nuts: 3 x 7/16UNF x 3 3/4" long 6 x 7/16UNF Washers 2 x 3/8 UNF x 1" long bolts + Nylock nuts 4 x 3/8 Flat washers	2 x Mounting pillars P/N -CAE-133 A+B 4 x M10 Allen Head Pillar bolts + Nyloc nuts

Installing your new "RACK-IT" Power Steering Rack is relatively straight forward. Please read instructions & be aware of modifications required prior to installation.

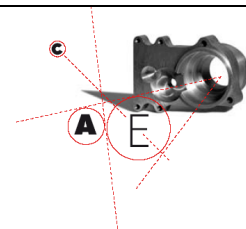
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caeperformance.com.au

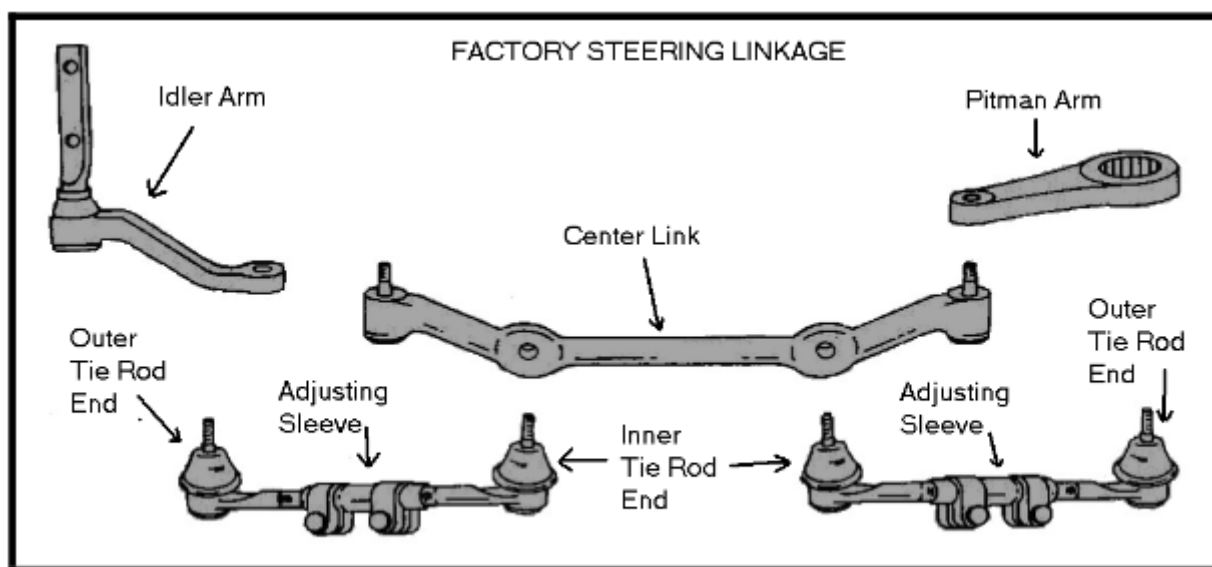


RP-PWR-HQ-WB

Prior to fitting your new Power Steering Rack, we recommend having your front end totally cleaned with a high-pressure washer to remove any old grease/dirt & build up. This will give a neat look and a clean area to work with.

Do not modify steering components to clear exhaust as engineering compliance/warranty will be void

Removing Original Steering



(Please review the illustration to help understand terminology below)

Remove Steering Linkage

Remove nuts & cotter pins from the outer tie rod ends. Remove the outer tie rods from the steering arms. Unbolt the steering arms from the spindles & save the bolts **as the arms must be reamed to suit new tie rod ends**. Unbolt idler arm, then remove the steering box nut below the pitman arm. Using a puller, remove the pitman arm. This will allow the entire stock steering linkage to be removed.

Note: Factory Column should not have to be removed, depending on what Column & Steering Uni's are being used.

Note: Steering arms will need to be reamed to suit tie rod end taper which is 7 degrees.

Note: 5ltr & 253 & 308 application – corner of engine mount will need to be trimmed to clear steering universal.

Note: Must use Z160 oil filter to clean mount

Note: Hoses and fittings can be supplied if required. Please advise on hose lengths and fitting orientation – 45 degree, 90 degree or straight.

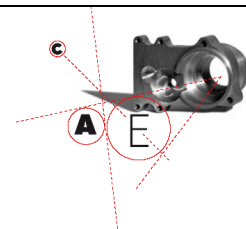
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepperformance.com.au

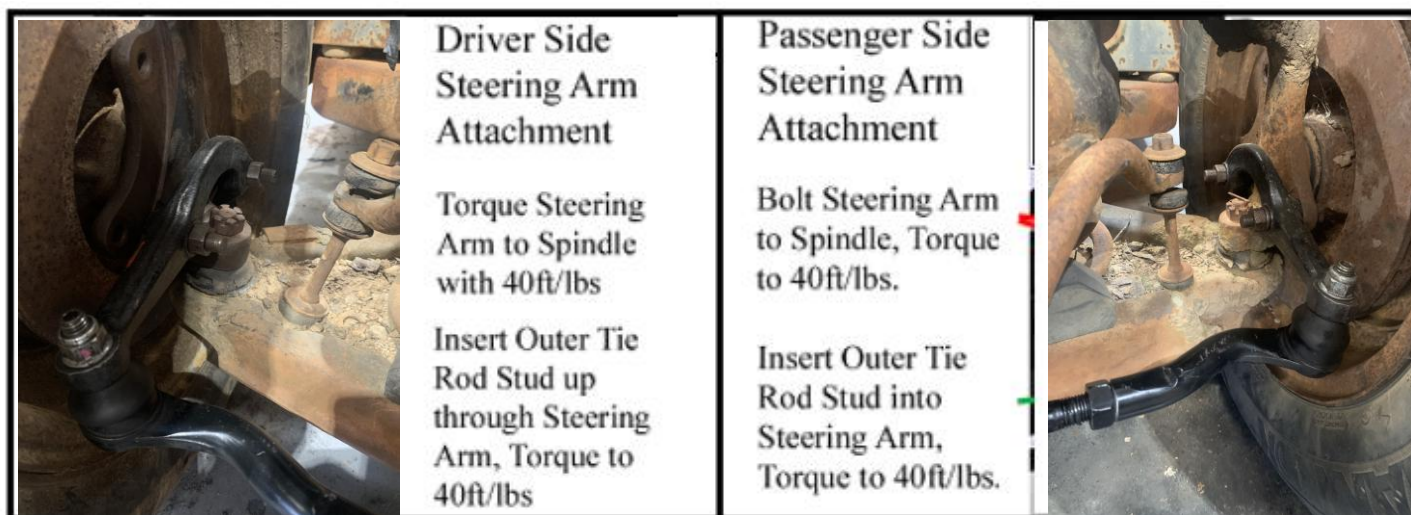


RP-PWR-HQ-WB

Note: CAE cannot guarantee fitment of all header/extractor applications due to availability of engines & exhaust components used. You may have to modify driver's side headers to suit the rack & pinion supplied.

Installing Power Steering Rack

1. Line up the holes in the mounting brackets to the holes in the frame, where the steering box & idler arm were located. Bolt brackets onto the frame, position nuts to the inside of the frame & bolt the brackets into the frame with 28ft/lbs of torque. (pic supplied below)
2. Bolt new steering arms on the spindles with 40ft/lbs of torque. **Note:** There are 2 different types of HQ steering arms: POWER steer and **NON PWR steer**. We recommend using POWER Steering Arms. Be sure you use the driver's side arm on the driver's side & the passenger side arm on the passenger side. Remember that the outer tie rods have changed, **so make sure the steering arms have been REAMED to suit the taper on the new tie rod ends.**
3. Check that the Power Steering Rack is in its centre. Thread the new outer tie rod ends equally onto each side of the power steering rack. Position wheels so that the toe-in is correct. Screw the outer tie rod ends on until the stud lines up with the steering arm holes. **Note: We recommend to get a front end wheel alignment after installation**



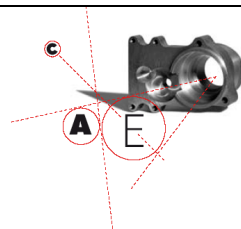
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepformance.com.au



RP-PWR-HQ-WB

HQ PWR RACK STEERING SHAFT INSTALLATION

**Steering
adapter shaft
P/N-ST-UNI-06**

FIREWALL

**Heim joint
P/N-ST-SUPPORT-3/4**

**Steering D shaft rod
P/N-ST-UNI-DD-SHAFT**

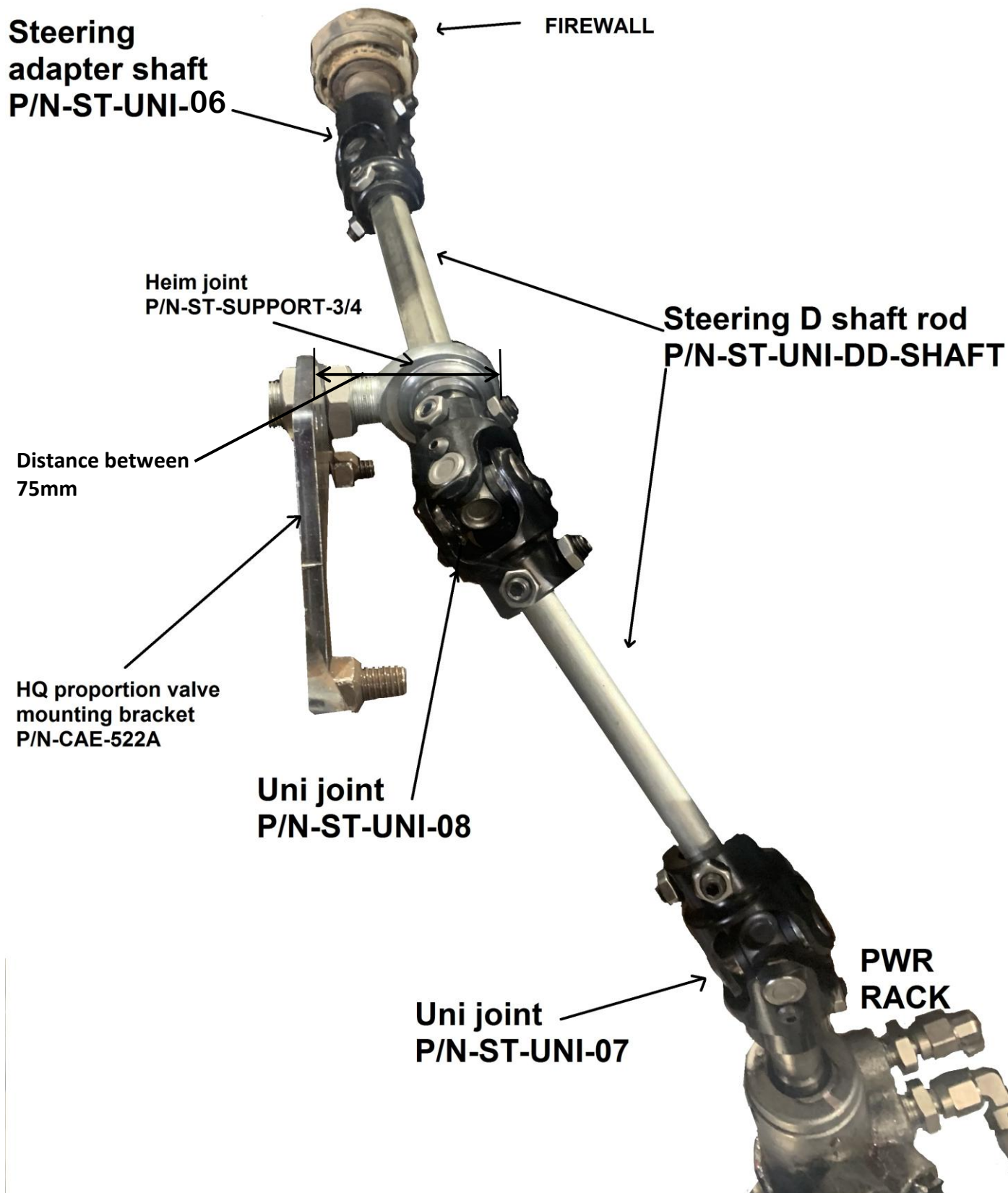
**Distance between
75mm**

**HQ proportion valve
mounting bracket
P/N-CAE-522A**

**Uni joint
P/N-ST-UNI-08**

**Uni joint
P/N-ST-UNI-07**

**PWR
RACK**



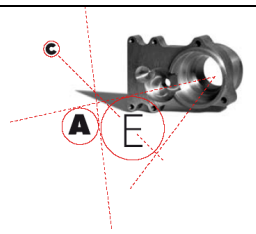
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

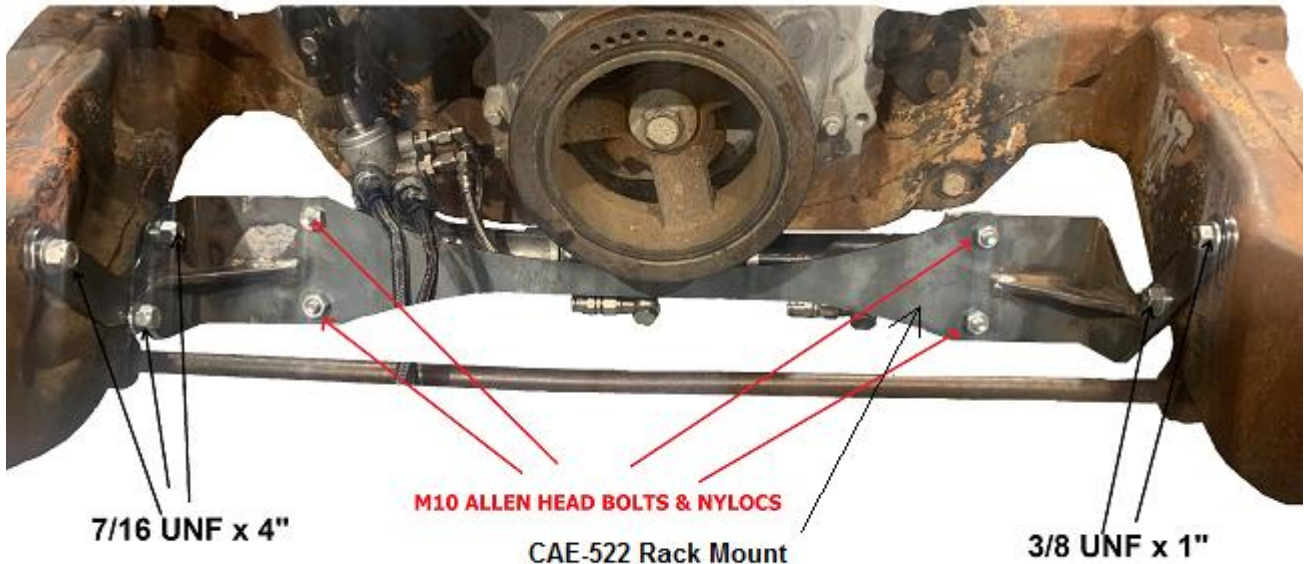
Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepperformance.com.au



RP-PWR-HQ-WB



HQ-WB HOLDEN POWER STEERING RACK BOLTS TO ORIGINAL MOUNTING POSITION USING SUPPLIED BOLTS

Power Steering Pump Connection

Since there are many different pump & bracket options available, it is virtually impossible for us to cover all installations steps.

Here are a few general things to follow. The pump you use should have a pressure rating of 1,100 PSI & a .5 GPM (Gallon per minute) flow rate. Keep in mind that this low flow, low pressure pump will give the driver of the vehicle the ease of power steering & maintain 'Road Feel'. Electric power steering pumps will also suit this application.

CAE Performance Products can provide Electric Power Steering Pumps or Mechanical Pumps & Brackets if required.

Power steering fluid – use ATF DX-3.

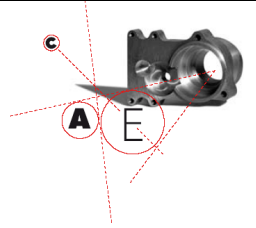
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

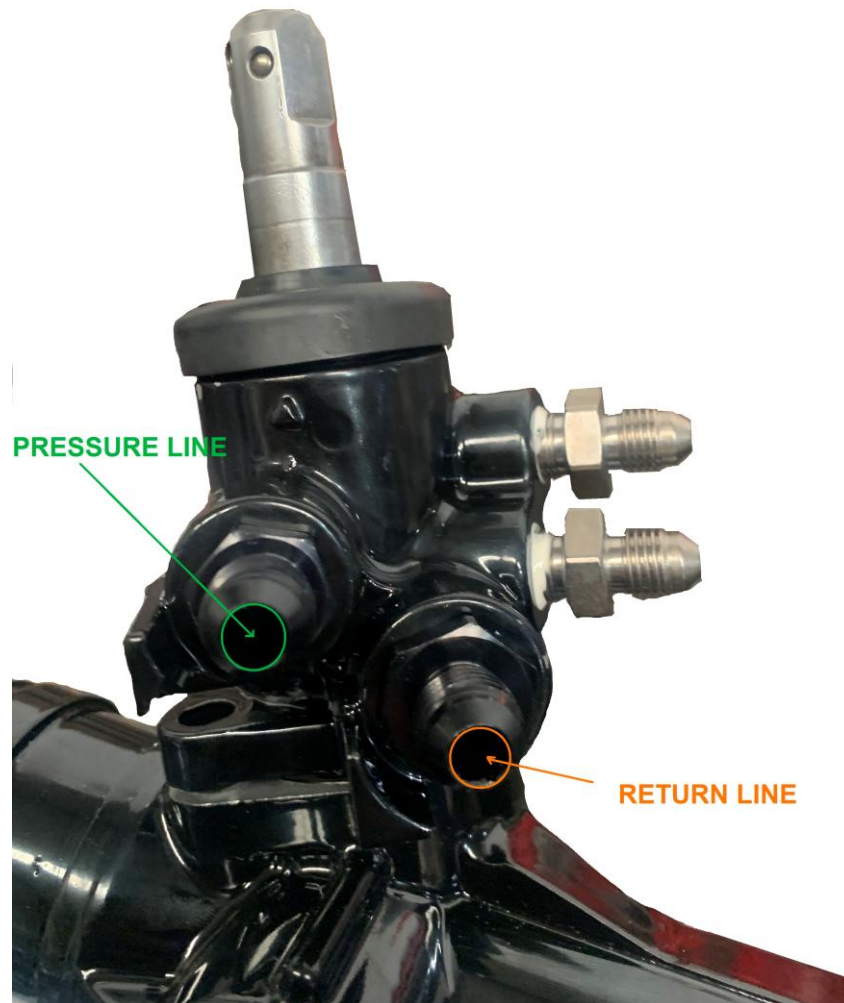
Email: info@caenterprises.com.au

Website: www.caepformance.com.au



RP-PWR-HQ-WB

Note: Below identifies which port is the pressure & which port is the return when attaching the steering lines & pump.



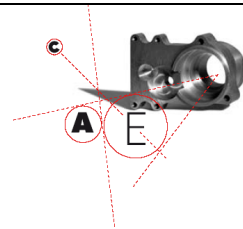
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caeperformance.com.au



RP-PWR-HQ-WB



Note: For correct clearances, Heim Joint should have 10mm of thread between locknuts and head.

Excess thread on Heim Joint may need to be removed to clear shims depending on vehicle

HQ Proportion valve mounting bracket uses original mounting position and factory hardware.



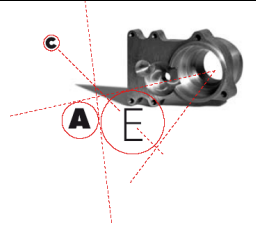
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepperformance.com.au



RP-PWR-HQ-WB

SERIAL NUMBER LOCATED HERE



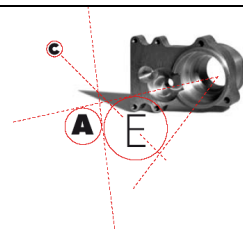
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caeperformance.com.au



RP-PWR-HQ-WB

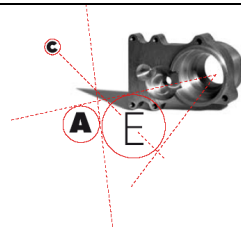
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caepperformance.com.au



RP-PWR-HQ-WB



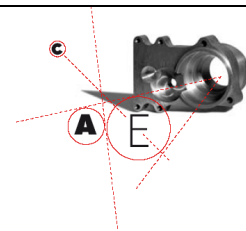
CAE PERFORMANCE PRODUCTS

7 MAIN ROAD CHEWTON 3451

Telephone: 03 5472 1442

Email: info@caenterprises.com.au

Website: www.caeperformance.com.au



RP-PWR-HQ-WB

C.A.E. PERFORMANCE PRODUCTS 'RACK-IT' POWER STEERING WARRANTY

Manufacturer's Warranty:-

All 'Rack-It' Racks & Components manufactured or modified by C.A.E. Performance Products Pty Ltd will be guaranteed against faulty workmanship for a period of twelve months.

The warranty is subject to the following conditions:-

- C.A.E. Performance Products recommends that this product be fitted by qualified personnel.
- All claims must be made within the warranty period.
- Any 'Rack-It' Rack & Components manufactured or modified that has been found to have faulty workmanship or related faults due to the workmanship of C.A.E. Performance Products will be replaced or repaired free of charge.
- The warranty will not apply to 'Rack-It' Racks & Components that has been installed incorrectly or has been subject to neglect, intentional or accidental damage, unauthorized repairs or modifications or used for the wrong application.
- The warranty does not cover installation or removal of 'Rack-It' Racks & Components or freight costs.
- The warranty will only apply to 'Rack-It' Racks & Components used for normal road use.

ORDERING

Orders can be placed by phone, fax or e-mail. We prefer official purchase orders from account customers. Please quote the part number, quantity and any special requirements when ordering.

SHIPPING

All orders are dispatched upon payment (except account customers). We ship Australia-wide every day. If you wish to use your own courier, please advise us of your courier name & account details & we can organize pick-up. Transport insurance can be arranged at the request of the purchaser.

DAMAGE

All goods are shipped in good condition & are packed accordingly. We can only handle damage

RETURN OF GOODS

All parts returned will incur a 20% re-stocking fee. Goods must be returned within 30 days & in resalable condition. Freight is to be paid by customer unless the goods are being returned due to manufacturing defect or shipping error, in which case they are to be shipped using our Australia Post Reply Paid account. C.O.D. post will NOT be accepted under any circumstances. Goods specifically made to customer requests cannot be returned for credit.

All goods remain the property C.A.E. Performance Products Pty Ltd until paid for in full.

PAYMENT

Payment can be made by credit card (surcharge), direct deposit, cheque/money order or cash over the counter. Please note that cheques & money orders must include the full amount of the order & freight costs. Personal