

# POWER CARRIAGE INSTALLATION GUIDE

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# POWER CARRIAGE INSTALLATION

This document provides instructions for installing the power carriage to the motorcycle dynamometer (dyno). To ensure safety and accuracy in the procedures, perform the procedures as they are described.

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#### **CONVENTIONS USED IN THIS MANUAL**

The conventions used in this manual are designed to protect both the user and the equipment.

example of convention	description
CAUTION	The Caution icon indicates a potential hazard to the dynamometer equipment. Follow all procedures exactly as they are described and use care when performing all procedures.
WARNING	The Warning icon indicates potential harm to the person performing a procedure and/or the dynamometer equipment.

#### **TECHNICAL SUPPORT**

For assistance, please contact Dynojet Technical Support at 1-800-992-4993, or write to Dynojet at 2191 Mendenhall Drive, North Las Vegas, NV 89031.

Visit us on the World Wide Web at www.dynojet.com where Dynojet provides state of the art technical support, on-line shopping, 3D visualizations, and press releases about our latest product line.

#### **PARTS LIST**

The following table lists all of the parts included in the Power Carriage Installation kit. Check your kit against the parts listed to make sure you have received all of the parts. If any part is missing, contact Dynojet Technical Support.

part number	description	quantity
36561284	Screw, 1/4-20 x 3/4" Button-Head	2
36561670	Bolt, 1/4-20 x 1", Hex	2
36912100	Washer, 1/4", Splitlok, STL	2



#### **INSTALLATION**

The power carriage is an electrically powered tire carriage allowing you to easily adjust for various wheel base distances.



The power carriage motor is preset to be installed with the carriage screwed in all the way. Do not run the motor prior to installing it on your dyno.



To prevent possible injury, disconnect the battery before performing any dyno maintenance or installing any optional accessory.

#### REMOVING THE HAND CRANK

- 1 Remove the hand crank from the tire carriage.
  - 1a Screw the carriage all the way in.
  - 1b Loosen the set screw on the hand crank and remove the hand crank.

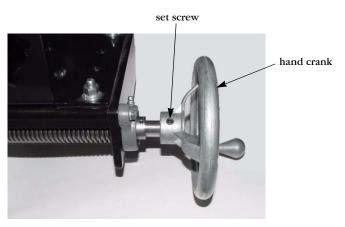


Figure 1: Remove the Hand Crank



- 2 Using a 5/32-inch allen wrench, loosen the two set screws in the lock collar and remove it from the screw shaft.
- 3 Using a 7/16-inch wrench, remove the two bolts securing the flange bearing.
- 4 Pry the flange bearing from the carriage screw shaft with a flat screwdriver and set aside.

**Note:** Clean the shaft with a fine grit emery cloth to remove any remaining thread lock residue. This will make it easier to slide the motor assembly and flange bearing on the shaft.

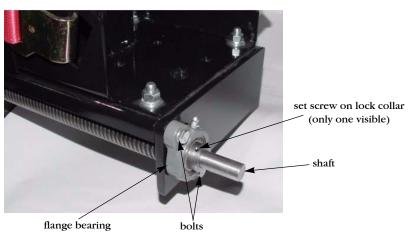


Figure 2: Remove the Flange Bearing

#### INSTALLING THE POWER CARRIAGE

1 Remove the two button-head screws securing the aluminum cover to the motor mount assembly and set aside.

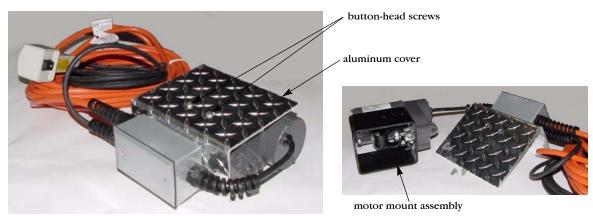


Figure 3: Remove the Aluminum Cover





2 Slide the motor mount assembly and flange bearing, removed earlier, over the screw shaft. Make sure the flex coupling is on the shaft.

**Note:** The flange bearing must be facing as shown in Figure 4 so the grease zerk is accessible.

Secure the motor mount assembly and flange bearing to the carriage using two  $1/4 \times 1$ -inch bolts and lock washers.

**Note:** Dynojet recommends using a 1/4-inch ratchet drive with universal joint and a 7/16-inch shallow socket to secure the flange bearing bolts.

4 Using a 1/8-inch allen wrench, tighten the flex coupling set screw.

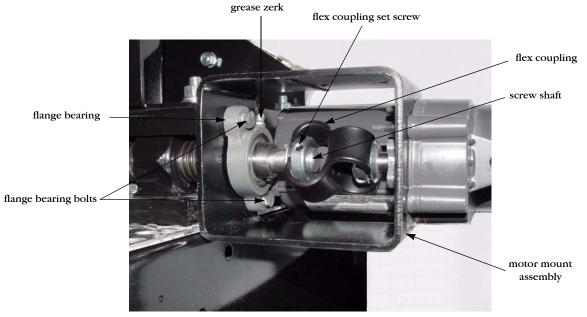


Figure 4: Install the Motor Mount Assembly



- 5 Secure the aluminum cover with the two screws you removed earlier.
- 6 Plug the power cord into a 120 volt power source.
  - **Note:** For European and 240 volt applications, a step down transformer must be used to provide 120 volts.
- 7 Using the pendant, move the power carriage through the entire range of motion making sure there is no binding or jamming.

**Note:** When operating the power carriage with a bike on the dyno, make sure the bike is in neutral.

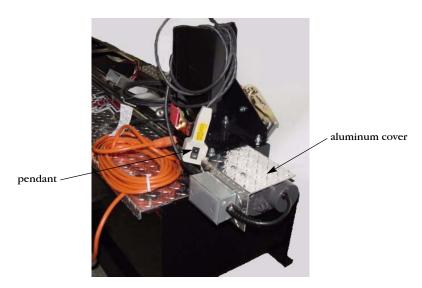


Figure 5: Power Carriage Secured to Dyno

