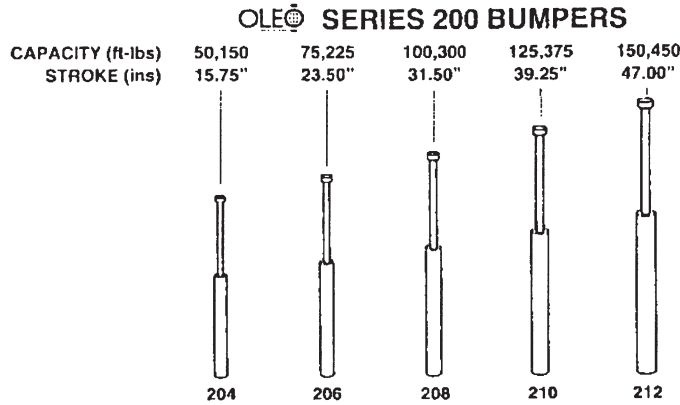


**INTRODUCTION**

Gantrex is proud to present the new **OLEO** 200 series bumper designed to meet a variety of applications considered too light for the normal heavy industrial range of shock absorbers.



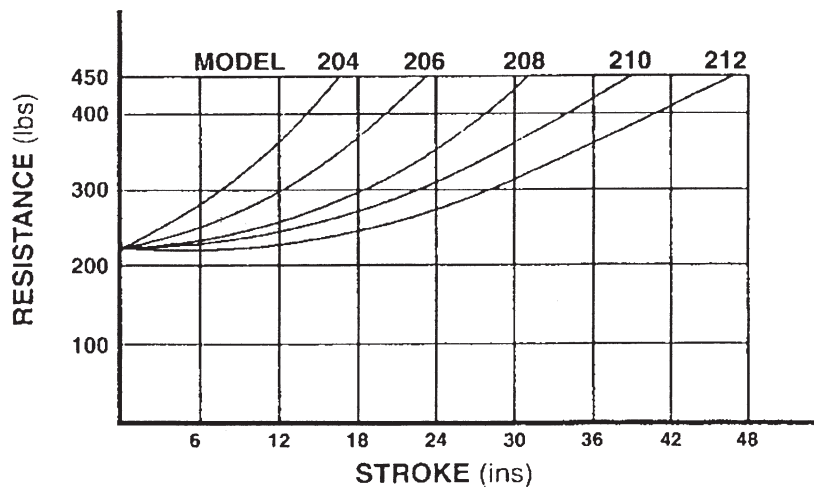
**PRINCIPLE OF OPERATION**

The operation of the **OLEO** 200 bumper is very simple. Upon impact, the plunger displaces oil through orifices in the metering tube, into the oil reservoir. The size and position of these orifices can be varied to suit different ranges of weights.

Plunger return is achieved by a gas spring recoil system. During production, the gas spring is inflated with nitrogen gas to a pressure of 72.5 psi (5 bars) and sealed for life. It requires no further attention after leaving the factory. The testing procedure utilizes a tracer gas which, although inert, can be detected in minute traces by sophisticated quality control equipment.

By virtue of the design of the bumper, under slow closure, the resistance is very low, which means that the bumper can easily be driven down, thus utilizing maximum runway length.

**STATIC RESISTANCE**



**PERFORMANCE AND DIMENSIONAL DATA**

| MODEL | STROKE<br>(ins) | ENERGY<br>CAPACITY<br>(ft lbs) | WEIGHT<br>(lbs) | DIMENSIONS (ins) |       |       |       |       |
|-------|-----------------|--------------------------------|-----------------|------------------|-------|-------|-------|-------|
|       |                 |                                |                 | L1*              | L2*   | L3    | L5*   | L7    |
| 204   | 15.75           | 50,150                         | 77              | 40.24            | 19.49 | 22.76 | 18.94 | 21.30 |
| 206   | 23.50           | 75,225                         | 95              | 56.97            | 27.36 | 31.16 | 26.81 | 30.16 |
| 208   | 31.50           | 100,300                        | 119             | 73.70            | 35.24 | –     | 34.68 | 39.02 |
| 210   | 39.25           | 125,375                        | 141             | 90.43            | 43.11 | –     | 42.56 | 47.87 |
| 212   | 47.00           | 150,450                        | 163             | 107.17           | 50.98 | –     | 50.43 | 56.73 |

\* When incorporating safety cable and/or bellows options, please increase dimensions L1, L2 and L5 as follows:

- for bellows only, add 3.150 ins.
- for safety cable plus bellows, add 3.150 ins.

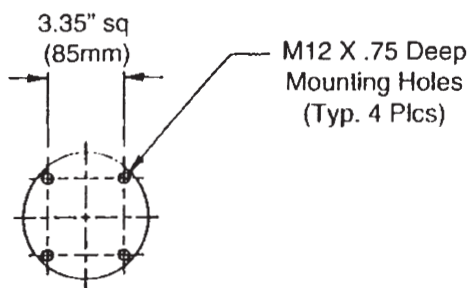
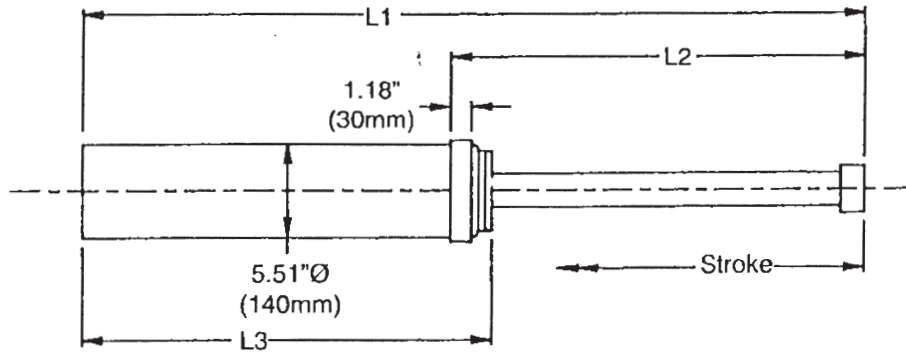
**IMPORTANT NOTES**

1. If ambient temperature is below -4°F (-20° C), special seals may be required.
2. Angular misalignment must not exceed 2°.
3. Within the performance capability of the shock absorber, it is possible, on special request, to supply metering tubes for higher mass ranges.
4. Shock absorber can be mounted in any position.
5. Unit is factory sealed and should never need gas or oil added.

**CODING DATA**

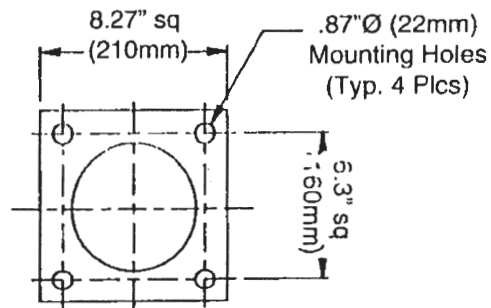
| MODEL                        | SEAL<br>ARRANGEMENTS   | MOUNTING<br>ARRANGEMENTS                        | OPTIONS                       | HEAD<br>DETAILS            | IMPACT WEIGHT (We)<br>(1000 lbs) | METERING<br>TUBE |
|------------------------------|--|---|-------------------------------|----------------------------|----------------------------------|------------------|
| 204                          | (M)  | Cartridge (C)                                   |                               |                            | UP TO 6.6                        | 03               |
| 206                          | Standard seals<br>suitable for<br>-4°F to +175°F<br>[-20°C to +80°C] | Front Flange (F)                                | Buffer head<br>only (V)       | 2.75 ins.<br>(70mm)        | UP TO 16.5                       | 07               |
| 208                          | ambient<br>temperature   | Rear Mounting (B)                               | Safety<br>cable (R)           | diameter<br>bumper<br>head | UP TO 33.0                       | 15               |
| 210                          |  | Front and Rear<br>Feet (T)                      | Bellows (N)                   |                            | UP TO 66.0                       | 30               |
| 212                          |  | Front foot with<br>rear mounting<br>support (D) | Safety Cable<br>& Bellows (J) |                            | UP TO 132.0                      | 60               |
| 208                          | M  | F   | V                             | 070                        |                                  | 60               |
| 208~MFV~070~60 SAMPLE CODING |  |   |                               |                            |                                  |                  |

STANDARD MOUNTING OPTIONS

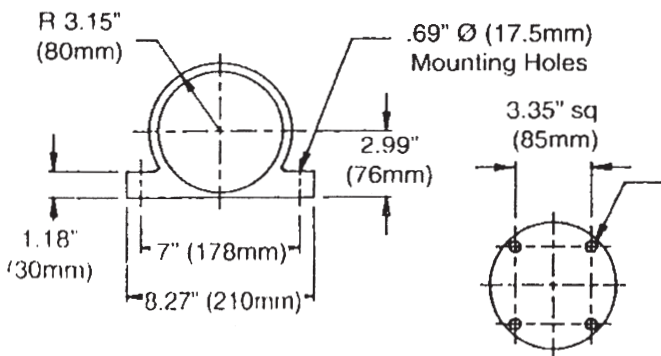
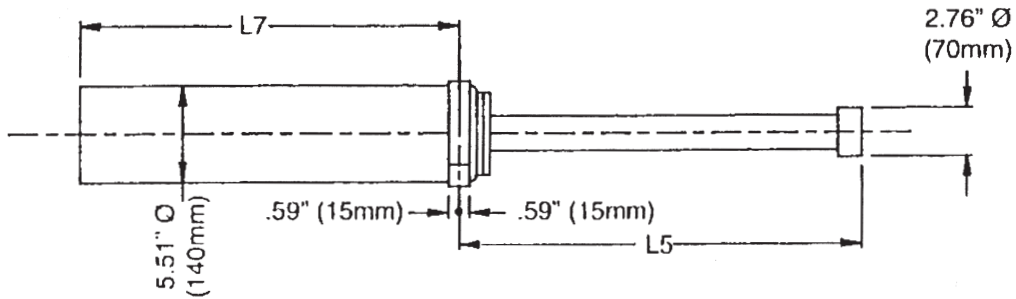


REAR MOUNTING (B)

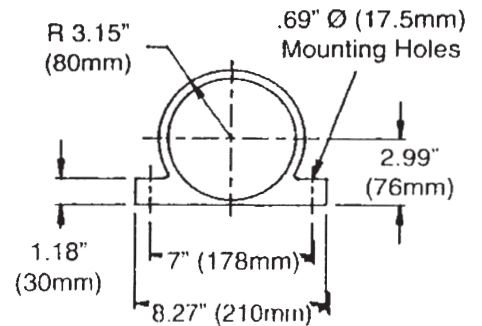
(Rear Mounting on 204 and 206 models only)



FRONT MOUNTING FLANGE (F)



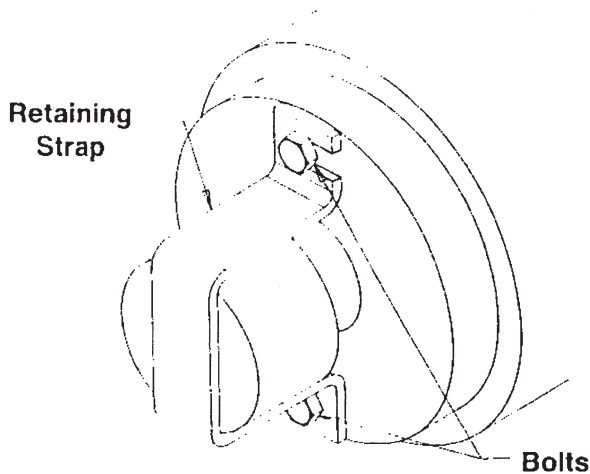
FRONT FOOT WITH REAR MOUNTING SUPPORT (D)



FRONT AND REAR FEET (T)

**INSTALLATION**

The OLEO 200 series shock absorber is supplied fully compressed (by means of a retaining strap and bolt arrangement), to reduce transportation costs and to ease handling.



The bumper can be completely installed without removing the retaining strap. To release the retaining strap, unscrew both of the strap bolts by only two turns each.

Using a hammer or screwdriver, drive the strap out of the way of the plunger.

**WARNING**  
**AT ALL TIMES KEEP FINGERS WELL CLEAR AS PLUNGER WILL EXTEND RAPIDLY ONCE FREE OF THE STRAP.**

Remove the strap and the bolts and check for full extension.

**SAMPLE APPLICATIONS**

