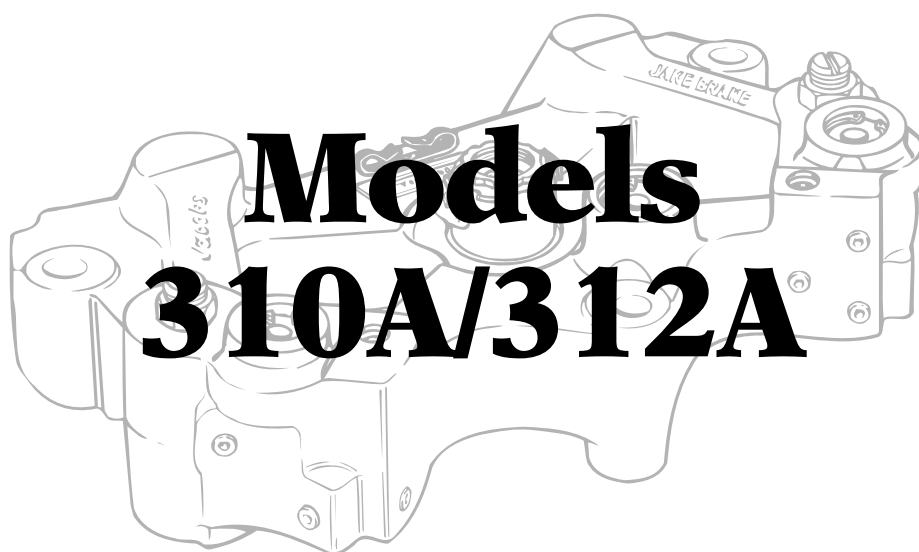




# Models 310A/312A

**For Caterpillar C-10 and C-12 Engines**

The Jake Brake® Model 310A is designed and approved for use on all 1996 and later Caterpillar C-10 engines with an engine serial number prefix of 2PN. The Jake Brake® Model 312A is designed and approved for use on all 1996 and later Caterpillar C-12 engines with an engine serial number prefix of 1YN.

Information in this manual was current at the time of printing and is subject to change without notice or liability.

# PARTS MANUAL

# Model 310A and 312A Housing Assemblies

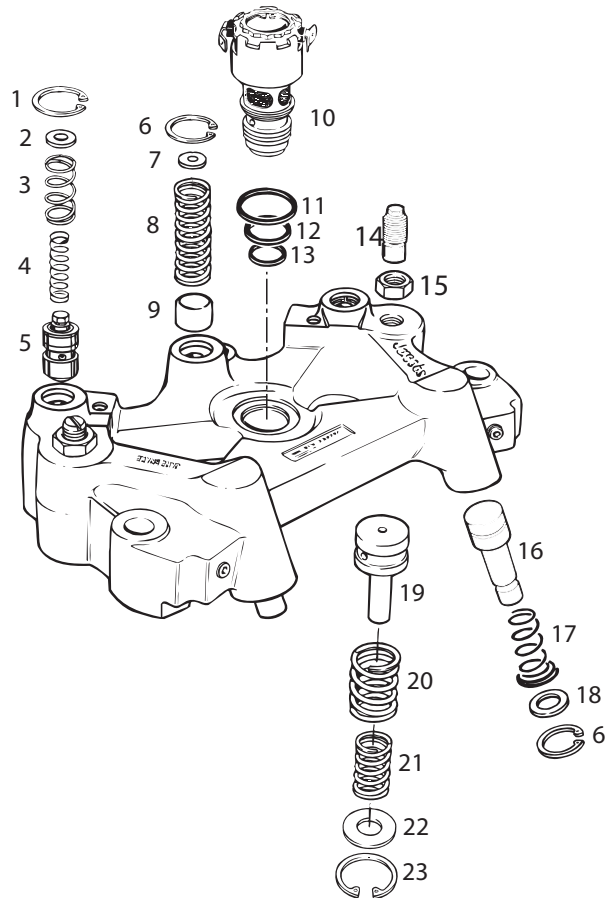
Engine

Brake Packaged

Model Hsg. P/N Description

|      |        |                               |
|------|--------|-------------------------------|
| 310A | 019499 | Housing assembly, 12 VDC, D/L |
| 310A | 021196 | Housing assembly, 24 VDC, D/L |
| 312A | 021078 | Housing assembly, 12 VDC, D/L |
| 312A | 022042 | Housing assembly, 24 VDC, D/L |

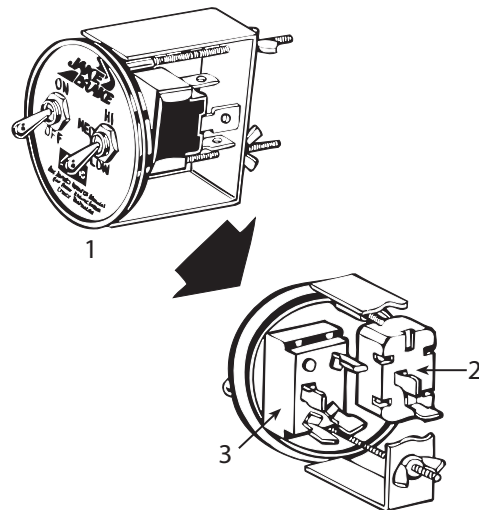
| III.<br>No. | Part<br>No. | Part Name                                                         | Qty./<br>Hsg. |
|-------------|-------------|-------------------------------------------------------------------|---------------|
| 1           | 015561      | Retaining ring                                                    | 2             |
| 2           | 014928      | Control valve cover                                               | 2             |
| 3           | 011434      | Control valve stop spring                                         | 2             |
| 4           | 011823      | Control valve inner spring                                        | 2             |
| 5           | 011283      | Control valve                                                     | 2             |
| 6           | 012991      | Retaining ring                                                    | 3             |
| 7           | 016505      | Accumulator washer                                                | 1             |
| 8           | 012990      | Spring                                                            | 1             |
| 9           | 012983      | Accumulator piston                                                | 1             |
| 10          | 01-019650   | Solenoid valve assembly, 12V D/L<br>(use with P/Ns 019499/021078) | 1             |
| 10          | 01-021253   | Solenoid valve assy., 24 V D/L<br>(use with P/Ns 021196/022042)   | 1             |
| 11          | 020229      | • Upper seal ring                                                 | 1             |
| 12          | 001082      | • Center seal ring                                                | 1             |
| 13          | 001083      | • Lower seal ring                                                 | 1             |
| 14          | 020477      | D-Lash™ assembly, 310A                                            | 2             |
| 14          | 020631      | D-Lash™ assembly, 312A                                            | 2             |
| 15          | 011395      | Hex jam nut                                                       | 2             |
| 16          | 019264      | Master piston assembly                                            | 2             |
| 17          | 019353      | Master piston spring                                              | 2             |
| 18          | 018144      | Master piston retainer washer                                     | 2             |
| 19          | 014664      | Slave piston                                                      | 2             |
| 20          | 014716      | Slave piston outer spring                                         | 2             |
| 21          | 014715      | Slave piston inner spring                                         | 2             |
| 22          | 013500      | Spring retainer                                                   | 2             |
| 23          | 011284      | Retaining ring                                                    | 2             |



## Control Group

P/N 020280, Cab Control Group

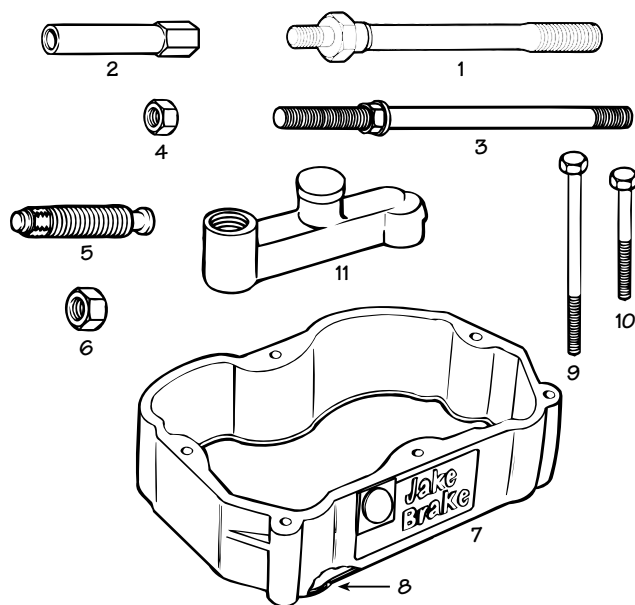
| III.<br>No. | Part<br>No. | Part Name                  | Qty./<br>Engine |
|-------------|-------------|----------------------------|-----------------|
| 1           | 019407      | Switch group               | 1               |
| 2           | 019915      | • ON/OFF toggle switch     | 1               |
| 3           | 019916      | • 3-position toggle switch | 1               |
| NI          | 020244      | Harness group              | 1               |
| NI          | 020357      | Control group instructions | 1               |



D/L Dual Lead (Note: Dual-lead solenoid harness is incorporated as part of the engine harness)

NI Not Illustrated

## Attaching Parts

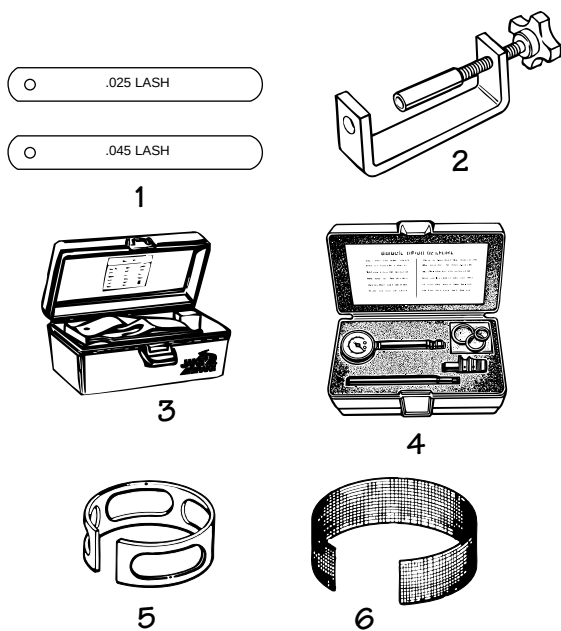


| Ill. No. | Part No. | Part Name                       | Qty./ Engine |
|----------|----------|---------------------------------|--------------|
| 1        | 022166   | Cylinder head bolt              | 3            |
| 2        | 014678   | Spacer                          | 3            |
| 3        | 016941   | Stud assembly, brake mounting   | 6            |
| 4        | 016553   | Hex nut, M12 x 1.75             | 6            |
| 5        | 014676   | Screw and pin assembly          | 6            |
| 6        | 014721   | Lock nut                        | 6            |
| 7        | 019028   | Spacer assembly (includes seal) | 3            |
| 8        | 015906   | • Seal (one per spacer)         | 3            |
| 9        | 014799   | Capscrew, 6 x 100 mm            | 18           |
| 10       | 014801   | Hex-head bolt, 10 x 70 mm       | 3            |

### Not Sold Separately -- Source through Caterpillar only

|    |        |                                                                         |   |
|----|--------|-------------------------------------------------------------------------|---|
| 11 | 6I4584 | Exhaust valve bridge<br>Order listed part number<br>through Caterpillar | 6 |
|----|--------|-------------------------------------------------------------------------|---|

## Service Parts



| Ill. No. | Part No.  | Part Name                                                       |
|----------|-----------|-----------------------------------------------------------------|
| 1        | 022045    | Feeler gage, 0.025" (0.64 mm)                                   |
| 1        | 016896    | Feeler gage, 0.045" (1.14 mm)                                   |
| 2        | 018238    | Slave piston removal tool                                       |
| 3        | 017465    | Tool kit for Jake Brake®,<br>all Caterpillar models             |
| 3        | 017469    | Tool kit for all Jake Brake models                              |
| 4        | 018280    | Oil pressure test kit                                           |
| 5        | 001283    | Solenoid screen retainer<br>(Use w/12 VDC solenoid, P/N 019650) |
| 5        | 020228    | Solenoid screen retainer<br>(Use w/24 VDC solenoid, P/N 021253) |
| 6        | 001282    | Solenoid screen<br>(Use w/12 VDC solenoid, P/N 019650)          |
| 6        | 020227    | Solenoid screen<br>(Use w/24 VDC solenoid, P/N 021253)          |
| NI       | 01-019764 | Bridge setting gage                                             |
| NI       | 019502    | Tune-up kit                                                     |
| NI       | 021406    | D-Lash™ assembly (6-pack), <b>312A</b>                          |
| NI       | 021492    | D-Lash™ assembly (6-pack), <b>310A</b>                          |



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