

**TRW Automotive**  
Steering & Suspension Systems

## Service Bulletin #TAS-102

### Illustration for Service Seal Kit TAS850004

Revised January, 1998

*This TRW Commercial Steering Division service bulletin has been written to help you repair commercial vehicles more efficiently. This bulletin should not replace your manuals; you should use them together. These materials are intended for use by properly trained, professional mechanics, NOT "Do-it-yourselfers". You should not try to diagnose or repair steering problems unless you have been trained, and have the right equipment, tools and know-how to perform the work correctly and safely.*

**⚠ WARNING** All steering mechanisms are safety critical items. As such, it is imperative that the instructions in the vehicle manufacturer's or TRW's latest published service manual are followed to the letter. Failure to observe the proper procedures, cautions and warnings may result in loss of steering.

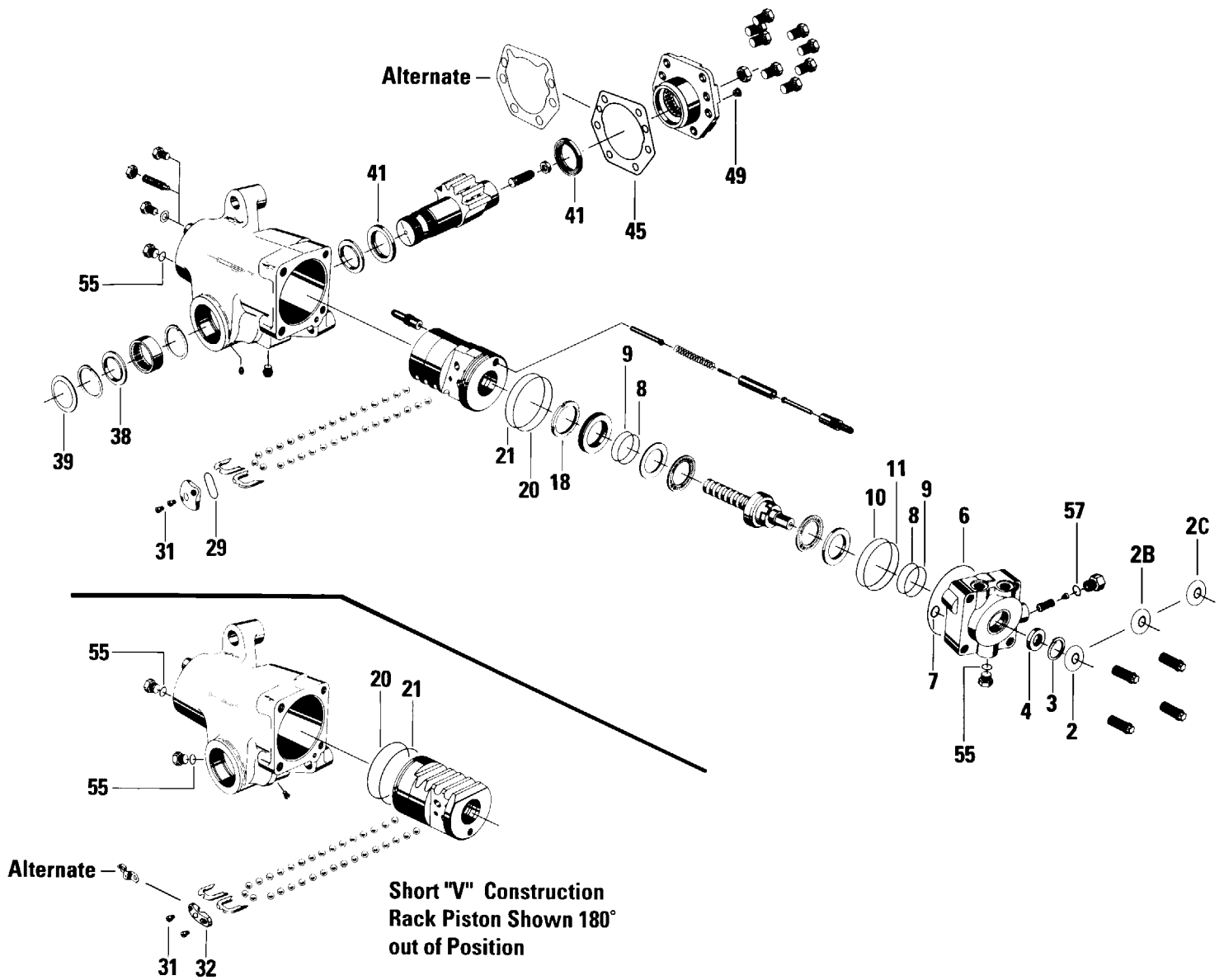
Service seal kits include service parts for more than one type of construction. Select the service kit parts required for the unit being serviced by comparing them with those being replaced.

Service seal kits include grease pack 406038 and all item numbers shown on this bulletin.

Use the Ball Return Guide Strap (32) as a direct replacement for the alternate "clip". Use the Torx screws included in the kit to secure the new strap. Discard the old clip and bolts.

The new side cover gasket (45) is a direct replacement for the older "alternate" design, even though it may look slightly different.

- \* Item 2 (Dirt & Water Seal with .687" I.D.) is for TAS units with 13/16" input serrations (P/N 478044).
- \* Item 2B (Dirt & Water seal with .735" I.D.) is for TAS units with 7/8" input serrations (P/N 478060).
- \* Item 2C (Dirt & Water seal with .852" I.D.) is for TAS units with 1" input serrations (P/N 478050).



| Item | Description                            | Part Number |
|------|--|-------------|
| 2    | Dirt & Water Seal (13/16 Serr.)* ..... | 478044      |
| 2B   | Dirt & Water Seal (7/8 Serr.)* .....   | 478060      |
| 2C   | Dirt & Water Seal (1" serr.)* .....    | 478050      |
| 3    | Retaining Ring .....                   | 401637      |
| 4    | Seal (Input Shaft) .....               | 478076      |
| 6    | Seal Ring (Valve Housing) .....        | 032834      |
| 7    | Seal Ring (Valve Housing) .....        | 029116      |
| 8    | Seal Ring (2) .....                    | 029123      |
| 9    | O-ring (2) .....                       | 032200158   |
| 10   | Seal Ring .....                        | 032823      |
| 11   | O-ring (Valve Housing) .....           | 032200152   |
| 18   | Adjuster locknut .....                 | 027007      |

| Item | Description                          | Part Number |
|------|--------------------------------------|-------------|
| 20   | Teflon Seal Ring (Rack Piston) ..... | 032547      |
| 21   | O-ring (Back up; Rack Piston) .....  | 032556      |
| 29   | Seal (Cap) .....                     | 478042      |
| 31   | Torx Screws (2-Cap) .....            | 020228      |
| 32   | Ball Return Guide Strap .....        | 400167      |
| 38   | Dirt Seal .....                      | 478057      |
| 39   | Dirt & Water Seal (Trunnion) .....   | 478059      |
| 41   | Seal (2-Output) .....                | 478084      |
| 45   | Gasket (Side Cover) .....            | TAS859000   |
| 49   | Vent Plug (Side Cover) .....         | 036201      |
| 55   | O-ring (2-Aux. Port Plug) .....      | 032229      |
| 57   | O-ring (Relief Valve) .....          | 032200153   |

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