

## Spicer<sup>®</sup>

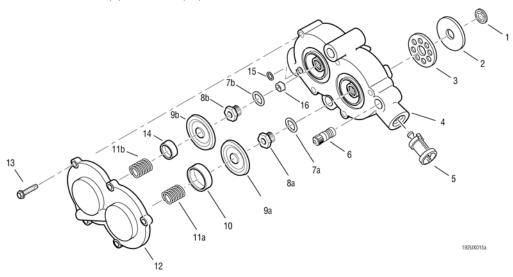
Axles & Brakes

## Wheel Valve Rebuild Kit - Number 512888

The following procedure describes the work required for rebuilding the Dana Tire Pressure Control System Wheel Valve Part number 673480. This requires the removal of the wheel valve from the vehicle. Follow the removal procedure from the Dana TPCS Service Manual AXSM-0010 to remove the wheel valve from the vehicle.

## **Removal Procedure:**

- 1. Remove wheel valve filter (5) and discard. (See Service Manual AXSM-0010, page 31.)
- 2. Remove five cover bolts (13) and remove wheel valve cover (12).
- 3. Remove two springs from cover (11a & 11b).
- 4. Remove backing plate (inflate smaller) (14).
- 5. Remove backing plate cup (deflate larger) (10).
- 6. Remove the inflate (9b) and deflate (9a) diaphragms and discard.
- 7. Remove inflate seat (8b) and discard o-ring (7b).
- 8. Insert small drill or punch and push out inflate seat check valve (16) and discard.
- 9. Remove deflate seat (8a) and discard o-ring (7a).
- 10. Remove wheel valve body o-ring (15) and discard.
- 11. Remove exhaust valve flapper retainer (1) and discard.
- 12. Remove flapper (2) and discard.
- 13. Remove exhaust flapper backing (3).
- 14. Remove tank valve (6).
- 15. Clean wheel valve body (4) and cover (12). Then dry with compressed air.



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## **Re-assembly Procedure:**

- 1. Install tank valve (6) (Use joint compound; do not use Teflon® thread tape.) and torque to 30–44 lb. in. (3.4–5.1 N•m).
- 2. Install filter (5). (See Service Manual AXSM-0010, page 31.)
- Insert inflate check valve (16) in the inflate seat (push with fingers, do not cut or pinch rubber). Do not lubricate.
- 4. Install o-ring (7b) on inflate seat, install in wheel valve body, and torque to 8–10 lb. ft. (10.8–13.5 N•m).
- 5. Install o-ring in deflate seat (7a), install in wheel valve body, and torque to 8–10 lb. ft. (10.8–13.5 N•m).
- 6. Install o-ring in wheel valve body (15).
- 7. Install new inflate (9b) and deflate (9a) diaphragms (part number side facing up toward cover).
- 8. Install backing plate (smaller) inflate side diaphragm (14).
- 9. Install backing plate (larger) on deflate side diaphragm (10).
- 10. Install springs (11a & 11b) in wheel valve cover (12) using a small amount of grease to hold springs in place.
- 11. Install wheel valve cover (12) using five bolts (13) and torque to 50–55 lb. in. (5.6–6.2 N•m).
- 12. Install exhaust backing plate (3), flapper (2), and retainer (1).
- 13. Pressure test tire side with 100 psi and check for leaks.

If leaks are found, re-check procedure.

- 14. Pressure check inflate side with 100 psi, by blocking off tire side.
  - If leaks are found, re check diaphragm seats and o-rings.
- 15. Install wheel valve on vehicle (see Service Manual AXSM-0010).
- 16. Check for leaks.

	Replacement Parts	
	Part Name	Part Number
1	Retaining Ring	599993
2	Flap Vent	599991
5	Filter	599791
7a & 7b	O-rings (Qty: 2)	599807
9a & 9b	Seal Diaphragm (Qty: 2)	673284
15	O-ring	113542
16	Check Valve Kit	676579

	Reuse Parts	
	Part Name	Part Number
3	Plate Support	300011
4	Body Wheel Valve	673300
6	Tank Valve	673215
8a & 8b	Seat (Qty: 2)	673285
10	Inflate Backing Plate (small)	599990
11a & 11b	Compression Springs (Qty: 2)	599985
12	Wheel Valve Cover	673300
13	Capscrew (Qty: 5)	300047
14	Deflate Backing Plate (large)	673768

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Dana Corporation

Commercial Vehicle Axle Division
PO Box 321
Toledo, Ohio 43697-0321

For spec'ing or service assistance, call 1-800-621-8084 24 hours a day, 7 days a week. Or visit our web site at: http://www.spicerparts.com.