



Installation Instructions

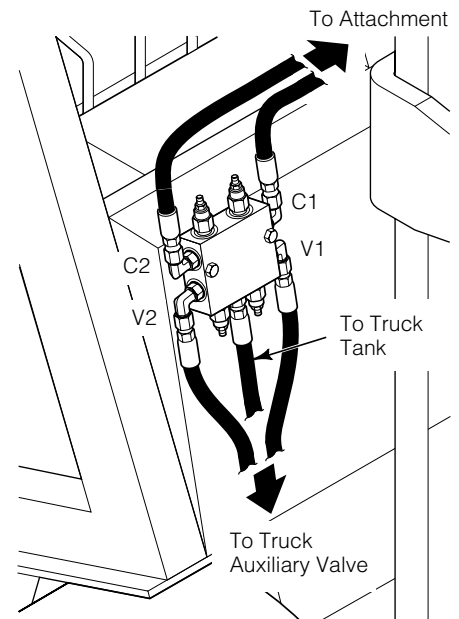
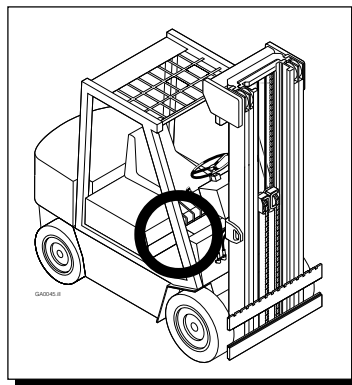
Flow Control Valves with Return to Tank

This sheet provides installation instructions and replacement parts list for Cascade Flow Control Valves with return to tank. The valve reduces the flow rate to the attachment and returns excess flow to the truck tank. The valves are available in the flow rates listed below.

Input Flow (GPM)	Output Flow (GPM)	Flow Control with Pressure Relief * Part No.	Flow Control Part No.
30	3.5	207496	212390
30	5	207497	212391
30	7	207498	212392
30	10	207499	212393
30	12	207500	212394
35	15	6026784	6026786
40	20	—	6026790
50	1	6026785	6038402
50	20	6037232	6037229

* 500-3000 PSI adjustable pressure relief.

- 1 Install five No. 8, 37° JIC/O-ring fittings in the valve body ports. The truck auxiliary valve to flow control valve hoses, tank hose and fittings must be No. 8.
- 2 Determine a valve mounting location on the truck cowl. The valve must clear the mast when fully tilted back. Use the shortest hose route possible from the truck auxiliary valve fittings to the flow control valve fittings.
- 3 Mount the valve on the truck cowl using 3/8 in. diameter capscrews (user supplied).



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Part No. 209536-R5

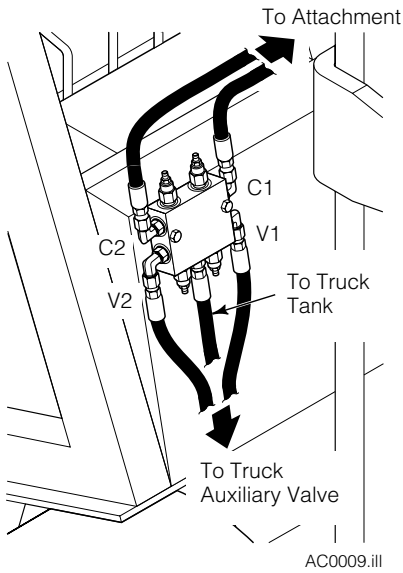
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- 4 Make two No. 8 hose assemblies to run from the valve fittings (V1 and V2) to the truck auxiliary valve fittings. Install the hoses.
- NOTE:** Port V1 is the input port for C1 output.
- 5 Connect the attachment supply group hoses to the valve output fittings (C1 and C2).
- 6 Install a Return Line Adapter Kit to run from the valve tank fitting (Tank) to connect to the truck tank main return hose. Cascade Return Line Adapter Kits are listed below for different ID tank hoses:

Return Line Adapter Kit Part No.	Tank Hose ID in. (mm)
214062	.75 in. (19 mm)
211745	1.00 in. (25 mm)
214066	1.25 in. (31 mm)
6037507	1.50 in. (38 mm)

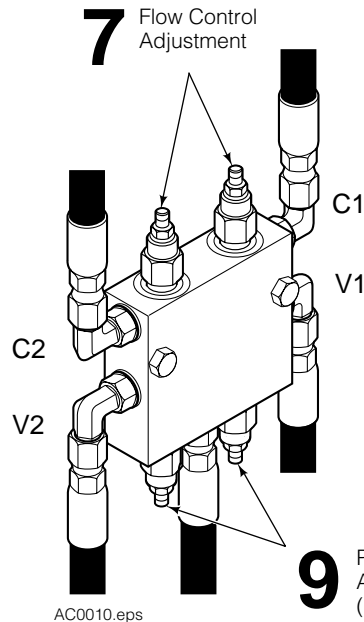
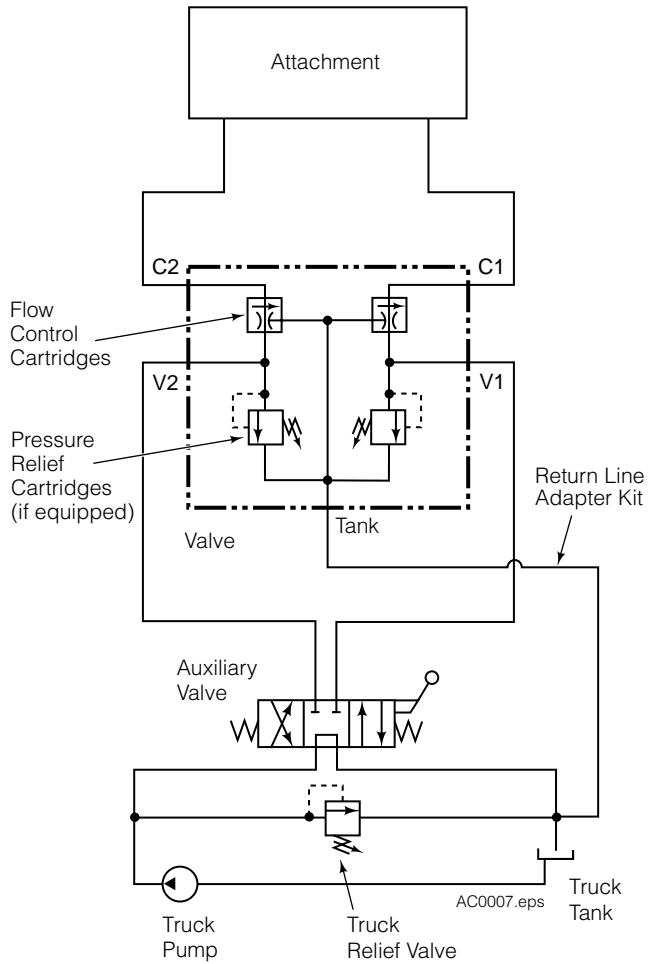
- 7 The flow control cartridges are adjustable $\pm 7\%$. Adjust each flow control separately to provide a satisfactory speed for the corresponding attachment function or to achieve a specific flow volume. Loosen the locking nut and turn the adjustment screw clockwise to decrease or counterclockwise to increase the volume.
- 8 The flow volume can be checked by installing an in-line flow meter between the attachment and flow control valve. Flow meter kits are available from the Cascade Parts Depot.

Flow (GPM)	Flow Meter Part No.
1-10	671476
1-20	671477
4-40	6043182

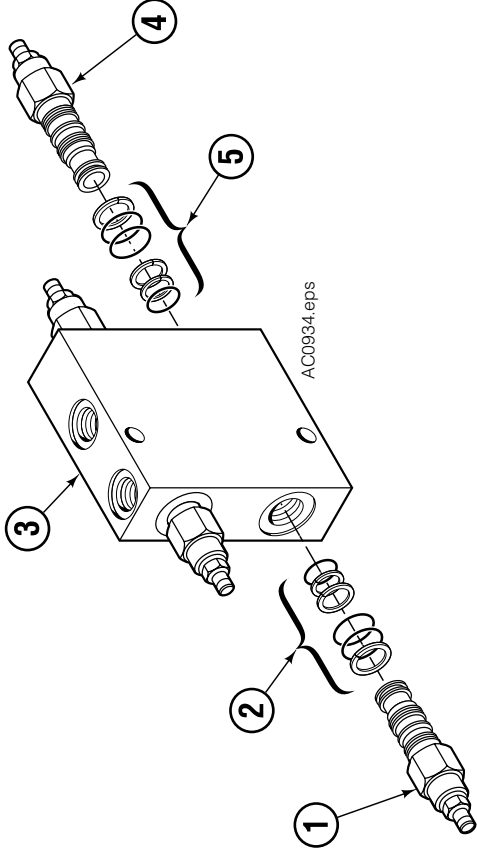
- 9 **Valves with Pressure Relief** – The pressure relief cartridges are adjustable from 500 to 3000 psi. Adjust each relief cartridge separately to achieve a specific operating pressure. Loosen the locking nut and turn the adjustment screw clockwise to decrease or counterclockwise to increase the pressure.

The pressure can be checked by installing a pressure gauge to port C1 and C2. Pressure gauge kit part no. 671212 which includes a 0-5000 psi gauge, hose and adapter fittings is available from the Cascade Parts Depot.

Before returning the truck/attachment to service operation, test all functions to assure they perform correctly.



Parts List



Flow Control Valves with Pressure Relief (Input Flow → Output Flow, 500-3,000 PSI adjustable relief)

REF	QTY	30→3.5 GPM PART NO.	30→5 GPM PART NO.	30→7 GPM PART NO.	30→10 GPM PART NO.	30→12 GPM PART NO.	35→15 GPM PART NO.	50→1 GPM PART NO.	50→20 GPM PART NO.	DESCRIPTION
1	2	207496	207497	207498	207499	207500	6026784	6026785	6037232	Valve Assembly
2	2	671827	671828	671829	671830	674607	6027628	6027629	6027629	Flow Control Cartridge
3	1	656223	656223	656223	656223	656223	6026295	6026295	6026295	Service Kit
4	2	204132	204132	204132	204132	204132	6027626	6027626	6037231	Valve Body
5	2	204134	204134	204134	204134	204134	211230	211230	6037230	Relief Valve Cartridge
	2	208769	208769	208769	208769	208769	208769	208769	—	Service Kit

Flow Control Valves without Pressure Relief (Input Flow → Output Flow)

REF	QTY	30→3.5 GPM PART NO.	30→5 GPM PART NO.	30→7 GPM PART NO.	30→10 GPM PART NO.	30→12 GPM PART NO.	35→15 GPM PART NO.	40→20 GPM PART NO.	50→1 GPM PART NO.	50→20 GPM PART NO.	DESCRIPTION
1	2	212390	212391	212392	212393	212394	6026786	6026790	6038402	6037229	Valve Assembly
2	2	671827	671828	671829	671830	674607	6027628	6027629	6038397	6037629	Flow Control Cartridge
3	1	656223	656223	656223	656223	656223	6026295	6026295	—	6026295	Service Kit
	2	204133	204133	204133	204133	204133	6027627	6027627	6037228	6037228	Valve Body

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