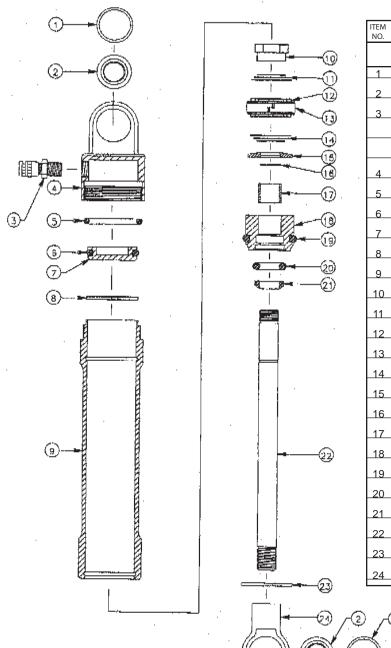


Formula Vee Front Shock Parts List



ITEM NO.	PART NO.	DESCRIPTION
	PS-FV	Formula Vee Shock
1	RR-10	Retaining Ring, .875 Spiroloc
2	MO-8T20	Monoball, .500 ID x .875 OD
3	IU-02	Air Valve, 1/8 NPT
	IU-04	Valve Core, 2000 psi
	IU-06	Valve Cap, High Temperature
4	BC-FV	Formula Vee Body Cap
5	OR-2125-B	O-Ring, 2-125, Buna 70 Duro
6	OR-2214-B	O-Ring, 2-214, Buna 70 Duro
7	PI-FVR	Piston, Formula Vee
8	RR-18	Wire Ring, .075 Wire Dia. x 1.350
9	BD-FV	Body, Formula Vee
10	NT-02R	Ring Nut, .500 x 20
11	VS	Valve Stack
12	PI-FV	Piston, Formula Vee
13	PB-FV	Piston Band, Formula Vee
14	VS	Valve Stack
15	VW-FV	Top Out Plate, Formula Vee
16	RR-20	Wire Ring, .045 Wire Dia. x .550
17	BU-08DU08	Bushing, DU .500 x .500
18	SB-FV	Shaft Bearing, Formula Vee
19	OR-2214-B	O-Ring, 2-214, Buna 70 Duro
20	OR-2206-B	O-Ring, 2-206, Buna 70 Duro
21	SL-06	Shaft Wiper, .500 Disorgn (white)
22	SH-FV	Shaft, Formula Vee
23	RR-18	Wire Ring, .075 Wire Dia. x 1.350
24	EY-FV	Eyelet, Formula Vee

MAIN OFFICE

MIDWEST

SOUTHEAST

CANADA

P.O. Box 1056 Reading, PA 19603 (610) 375-6180 (610) 375-6190 Fax

P.O. Box 666 Brooklyn, MI 49230 (517) 592-6681 (517) 592-3696 Fax P.O. Box 11586 Daytona Beach, FL 32114 (386) 274-5336 (386) 274-5442 Fax 360 York Rd., RR#4 N.O.T.L. Ontario L0S-1J0 (905) 684-7418 (905) 684-1774 Fax

www.penskeshocks.com



Formula Vee Shock

Disassembly / Assembly Instructions

Disassembly

- 1. Depressurize Shock
- 2. Clamp the body cap eyelet in vise with shaft pointing up.
- 3. Depress the shaft bearing assembly enough to remove the wire retaining ring. Remove the wire retaining ring and pull out the shaft assembly.
- 4. Drain the oil when needed. Please dispose of properly.
- 5. Clamp the shaft eyelet in vise with piston pointing up.
- 6. Remove the 3/4" ring nut to access valving or to change seals in the shaft bearing.
- 7. Inspect and replace damaged o-rings and wiper if needed. When replacing the o-ring or wiper inside the shaft bearing, remove the wire retaining ring under the top-out plate or damage may occur to the seals.

Assembly

- Reassemble shaft / piston assembly. It is very important to return the valve stacks to the proper orientation.
 With the shaft still in the vise, the compression valve stack is on the bottom and the rebound on the top (Refer to page 3).
- 2. Torque 3/4" ring nut to 25 ft/lbs (300 in/lbs).
- 3. Pressurize reservoir to reposition floating piston (approx. 100 lbs.). THIS STEP IS VERY IMPORTANT!
- 4. Fill shock body with oil (2.5 weight oil is recommended).
- 5. Insert shaft and piston assembly into shock body and begin to work out air bubbles trapped in the piston by using 1/2"-1" strokes. Move the shaft up and down a few times. Lightly tap the eyelet with a hammer a few times to assure all the air bubbles are gone. NOTE: Repeat as need. It is very important to remove all air bubbles.
- 6. Pull the shaft up until the top-out plate or droop limiter (if applicable) is just below the surface of oil.
- 7. Top the shock off with oil. While holding the shaft, work the shaft bearing into the body until the o-ring seats against the body.
- 8 Depressurize the reservoir and push the shaft bearing into the shock body and replace the wire retaining ring.
- 9. Pressurize with nitrogen to 100 psi.

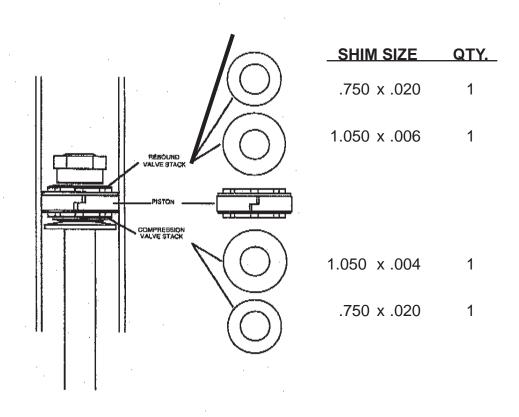
IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT US AT 610-375-6180.

MAIN OFFICE	MIDWEST	SOUTHEAST	CANADA
P.O. Box 1056	P.O. Box 666	P.O. Box 11586	360 York Rd., RR#4
Reading, PA 19603	Brooklyn, MI 49230	Daytona Beach, FL 32114	N.O.T.L. Ontario L0S-1J0
(610) 375-6180	(517) 592-6681	(386) 274-5336	(905) 684-7418
(610) 375-6190 Fax	(517) 592-3696 Fax	(386) 274-5442 Fax	(905) 684-1774 Fax

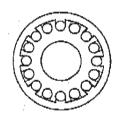


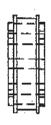
Formula Vee Valving

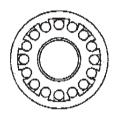
The Formula Vee Shock (Part #PS-FV) is delivered with both compression and rebound valved to the specifications below. In the event that you wish to make changes to the valving, please refer to the service directions on page 2 and the chart below for shim choice.



MAIN PISTON







The main piston is symmetrical on both the compression and rebound sides. When replacing the piston, after service, the piston may be oriented in either direction.

INIDAAESI
P.O. Box 666
Brooklyn, MI 49230
(517) 592-6681
(517) 592-3696 Fax

SOUTHEAST
P.O. Box 11586
Daytona Beach, FL 32114
(386) 274-5336
(386) 274-5442 Fax

MAIN OFFICE
P.O. Box 1056
Reading, PA 19603
(610) 375-6180
(610) 375-6190 Fax

WESI	
2499 S. Stockton St.	
Lodi, CA 95240	
(209) 368-5040	
(209) 368-5119 Fax	

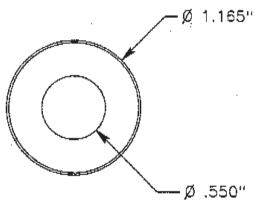
CANADA
360 York Rd., RR#4
N.O.T.L. Ontario L0S-1J0
(905) 684-7418
(905) 684-1774 Fax



Formula Vee Droop Limiter

For Use in Formula Vee Front Shocks



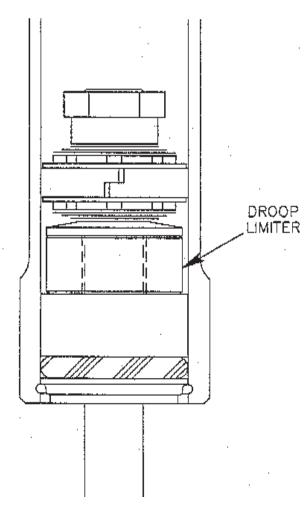


In the event that you wish less droop in the front of your car, there is an alternative to running a shorter shock length.

If you have access to a machine shop and lathe, making your own droop limiter will be very simple.

Starting with 1.250" Nylon or Aluminum stock, drill a .550" center hole then cut to desired length that you wish to subtract from your cars droop. The over all length of the shock without a droop limiter is 13.9".

To install a droop limiter, disassemble shocks according to directions and remove the piston, shims, and top-out plate. Slide the droop limiter on to the shaft so that it will be located between the shaft bearing and top-out plate. Reassemble shocks



MIDWEST

P.O. Box 666 Brooklyn, MI 49230 (517) 592-6681 (517) 592-3696 Fax SOUTHEAST

P.O. Box 11586 Daytona Beach, FL 32114 (386) 274-5336 (386) 274-5442 Fax MAIN OFFICE P.O. Box 1056

P.O. Box 1056 Reading, PA 19603 (610) 375-6180 (610) 375-6190 Fax WEST 2499 S. Stockton St.

Lodi, CA 95240 (209) 368-5040 (209) 368-5119 Fax CANADA

360 York Rd., RR#4 N.O.T.L. Ontario L0S-1J0 (905) 684-7418 (905) 684-1774 Fax