

**Unloaders Made Ready (UMR) Kits**



Take the guess work out of replacing a worn unloader.

**Unloaders Made Ready Kits:**

- Unloader
- Inlet filter
- QC discharge
- Thermal relief
- Push on hose barb
- Roll of teflon tape
- Installation sheet

*Components not connected*

Part	Unloader	GPM	PSI	Inlet	Outlet
4900	VR54	8.0	2900	3/8F	1/4F
5553	VRT3-160	7.8	2320	3/8F	1/4F
5402	VRT3-160	7.8	2320	1/2F	3/8F
4254	VR54	8.0	2900	1/2F	3/8F
4927	VR56	8.0	3625	1/2F	3/8F
5233	VRT3-250	7.8	3650	1/2F	3/8F
4642	VRT3-310	7.8	4500	1/2F	3/8F
6174	VRT3-310EZ	7.8	4500	1/2F	3/8F
6128	VHP39-EZ	11.0	5000	1/2F	3/8F

**mecline VRT3 Pressure Actuated**

- 7.8 GPM maximum
- 194°F. maximum
- Dual 3/8" FPT inlet
- 3/8" FPT outlet
- Dual 3/8" FPT bypass



Part	Model	Spring	PSI
5483	VRT3-160	Yellow	2320
5056	VRT3-250	Blue	3650
5057	VRT3-310	Black	4500

**VRT3 w/built-in EZ start**

Part	Model	Spring	PSI
4518	VRT3-310EZ	Black	4500

**VRT3 w/Injector**

Unloader has 2.1mm injector, ez start valve and thermal relief valve



Part	Model	Spring	PSI
5058	VRT3-310	Black	4500

**VRT3 w/pressure switch**



Part	Model	Spring	PSI
5882	VRT3-250	Blue	3650
6818	VRT3-310	Black	4500

**Repair Kits**



Part	Model
5126	Repair kit VRT3-160&250
5137	Repair kit VRT3-310
6034	Repair kit AL600 Series

**VRT100 High Flow**



**NEW 2015**

- 26 GPM maximum
- 1/2" FPT inlet, outlet, bypass
- Multi-gun usage

**Dual Bypass**

Part	Model	Spring	PSI
6895	VRT100-190D	Yellow	2465
6807	VRT100-330D	Blue	4640

**Single Bypass**

Part	Model	Spring	PSI
6330	VRT100-190D	Yellow	2465
6331	VRT100-330D	Blue	4640

**VR54 Pressure Activated**

Replaces MV520 & MV540

- Hexagonal check valve for better smoothness
- Easy maintenance: unit removable from the top
- Adjustment ring nut



- 8GPM
- 194°F. max
- 2900 PSI max
- 3/8 MPT inlet
- 3/8 MPT outlet
- 3/8 FPT bypass

Part
6961

**VR56 Pressure Activated**

Replaces MV560

- Hexagonal check valve
- Easy maintenance: unit removable from the top
- Pressure gauge port with integrated plug



- 8GPM
- 194°F. max
- 3625 PSI max
- 3/8 MPT inlet
- 3/8 MPT outlet
- 3/8 FPT bypass

Part
6706

**VRS3 Pressure Activated**

Replaces MV580

- Hexagonal check valve
- Safety lock at maximum pressure
- Bottom inlet



- 8GPM
- 194°F. max
- 3600 PSI max
- 3/8 FPT inlet
- 3/8 FPT outlet
- 3/8 FPT bypass

Part
6983

**VHP 39**

- 5650 PSI
- 10.5 gpm
- 190°F. maximum
- Dual Inlet 3/8" FPT
- Outlet 3/8" FPT
- Dual Bypass 3/8FPT



Part	Unloader	Spring
6378	VHP 39	Black
6817	VHP 39EZ	Black



**Zeromatic 83 Multi-Gun**

- 10 GPM max
- 3600 PSI max
- 190°F max
- Dual 1/4" ports
- Inlet 1/2FPT
- Outlet 3/8MPT
- Dual Bypass 3/8"FPT

Part	Product
6646	AR2907
6649	1830 kit



**ST-261**

Can be panel mounted

- 8 GPM max
- 3625 PSI max
- 176° F. max
- 3/8" FPT in/out
- 1/4" FPT bypass

Part	Model
1396	ST-261
4655	Valve Kit 200261526
5661	Kit "A" 200261528
5660	Kit "F" 200060720
5374	Panel mount nut



**ST-261 Tamper Proof**

Ideal for rental machines

Preset unloader. Put on cover, can't be readjusted.

Part
6824



**ST-261 w/Injector**

Built-in down stream (venturi type) injector with built in orifice more precise siphon rate

Part	Model
1452	1.8mm inj.
1453	2.1mm inj.
1397	2.4mm inj.



**ST-261 w/pressure switch**

With 110 volt micro switch

Part	Model
2379	ST-261 with micro switch
3847	Complete switch assembly



**ST-280 Pressure**

- 8 GPM maximum
- 4060 PSI maximum
- 176°F. maximum
- 3/8" FPT inlet
- 3/8" FPT outlet
- 1/4" FPT bypass

Part	Model
3710	ST-280
5662	Kit "C"
5663	Kit "D"



**ST-291 Pressure**

- 3/8" FPT inlet
- 3/8" FPT outlet
- 1/2" FPT bypass
- 8 GPM maximum
- 5070 PSI maximum
- 176°F. maximum

Part
6647



**Pulsar 4 Pressure Actuated**

- 10.5 GPM maximum
- Hexagonal piston replaces roll pin on stem
- New bypass fitting ball always in axis with seat
- Larger porting throughout to allow higher flow
- New design plastic knob

- 10.5 GPM maximum
- 4000 PSI maximum
- 194°F. maximum
- 3/8" FPT in/out
- 3/8" FPT bypass

EZ model must be installed vertically

Part	Model
6437	Pulsar 4
6438	Pulsar 4 EZ dual bypass
6439	Repair kit



**Pulsar 4 w/pressure switch**

- 8 GPM max
- 3650 PSI max
- 195°F. max
- 3/8" FPT in/out
- 3/8" FPT bypass
- 1/4" FPT gauge

Part
6440



**YVB9KMS2 w/pressure switch**

- 10.5 GPM maximum
- 4000 PSI maximum
- 195° maximum
- 3/8" FPT in/out
- Dual 3/8" FPT bypass

Part
5406



**VB3K Pressure**

•Minimum PSI down to 323 PSI

- 6.5 GPM maximum
- 195°F. maximum
- 3/8" FPT bypass
- 4107 1/4" gauge port

GP TT series 51 pumps

Part	Model	Inlet	Outlet	PSI
4107	YVB3KA	3/8" MPT	3/8" MPT	3200
6017	YVB3KTT	1/4" MPT	3/8" MPT	3650





**VB7K Pressure Unloader**



- 8.0 GPM maximum
- 3200 PSI maximum
- 190° F. maximum
- 3/8" MPT inlet
- 3/8" FPT outlet
- 3/8" FPT bypass

<b>Part</b>
<b>3594</b>

**VB350S/YU5075KS**



- 10 GPM maximum
- 5100 PSI maximum
- 190°F. maximum
- 3/8" MPT inlet
- 3/8" FPT outlet
- 1/2" FPT bypass

<b>Part</b>
<b>4906</b>

**HM Regulating w/EZ start**



- Built-in easy start
- 10.8 GPM maximum
- 3000 PSI maximum
- 165°F. maximum
- 3/8" FPT in
- 3/8" MPT out
- Dual 3/8" FPT bypass

Part	Item
<b>2169</b>	HM Unloader
<b>4080</b>	Kit 72 Repair

**High flow Pressure Actuated**



- 21 GPM max
- 200°F. max
- 1/2" FPT in & bypass
- 1/2" FPT outlet

Part	Model	Spring	PSI
<b>6966</b>	YUW21235	White	2175
<b>6965</b>	YUB21405	Blue	4050

**Dual Bypass**



Part	Model	Spring	PSI
<b>6959</b>	YU21235	Yellow	2175
<b>6548</b>	YU21405	Green	4500
<b>6960</b>	Repair kit	21235	
<b>4910</b>	Repair Kit	21405	

**303 Stainless Steel**



Part	Model	Spring	PSI
<b>4457</b>	YU2158 VB80/400	Black	6500

**YU5221**



- 53 GPM max
- 2450 PSI max
- 200°F. max
- 1" FPT I/O, bypass

Part	Product
<b>4458</b>	YU5221
<b>4456</b>	Repair Kit



**Multi-Gun Pressure Actuated**



- 21 GPM maximum
- 200°F. max
- 1/2" FPT I/O, bypass

Part	Model	PSI
<b>6579</b>	YVB4021B	4050
<b>6571</b>	YVB5121B	5100



**22760A**



- 8 GPM maximum
- 160°F. maximum
- Dual 3/8" FPT inlets
- 3/8" FPT outlet
- Dual 1/4" FPT by

Part	Model	PSI
<b>2168</b>	22760A	3000
<b>3503</b>	Repair kit	

**Multi-Gun High Flow**



- Pressure actuated
- 160°F. maximum



Part	Model	Spring	GPM	PSI	In/Out Bypass
<b>1786</b>	22911A	Yellow	13.0	1400	1/2FPT
<b>1630</b>	22912A	Red	13.0	2400	1/2FPT
<b>1631</b>	22913A	Orange	13.0	3500	1/2FPT
<b>4464</b>	22971C	Yellow	35.7	1740	3/4FPT
<b>3527</b>	Standard	Repair kit			
<b>3740</b>	Repair kit	kit "B"			

**SMC Unloaders**



- 4 GPM maximum
- 200°F. maximum
- 3/8" MPT in & out
- 1/4" FPT bypass

Part	PSI
<b>1582</b>	400-1000
<b>1583</b>	800-1500



**2SF Unloaders**



- 6 GPM max
- 160° F. max
- 3/8" MPT inlet
- 3/8" MPT outlet

Part	Model	PSI
<b>2799</b>	7500 for 2SF	2000
<b>5986</b>	7500XS 2SFX	2000
<b>4482</b>	Kit for 7500	

## BOLT-ON UNLOADERS



### 4SF Unloader

- 6 GPM maximum •3/8" MPT outlet
- 160° F. maximum •3/8" FPT bypass
- 3/8" MPT inlet

Part	Model	PSI
2800	7600S for 4SF	3000
4483	Kit for 7600S	



### 66DX Pump Bolt-on

- 6 GPM max •3/8" FPT inlet
- 160° F. max •3/8MPT outlet

Part	Model	PSI
1936	7800/7860	4000



### 7535 Unloader

- 21 GPM maximum •1/2" FPT in/out
- 180°F. maximum •1/2" FPT bypass

Part	Model	Spring	PSI
2802	7535	Blue	4000



### Pressure Regulator

Pressure regulators main function is to set and maintain consistent system pressure while also acting as a primary pressure relief device. DOES NOT UNLOAD

- 2.5 to 7.8 GPM •3/8" FPT in/out
- 160° F. maximum •3/8" FPT bypass

Part	Model	Spring	PSI
2804	7082	Blue	3575



### Bolt-on Unloaders

#### Minimatic 4/B

For RC, XT & XM Pumps

- 2600PSI max
- 165°F max
- 1/2 FPT inlet
- 3/8 MPT outlet

Part	Product	GPM
6090	AR21039 w/inj	2-3
6091	AR21040 w/inj	3-4
6445	AR20821 no inj	2-5
6611	Kit 2572 bolt & oring	
6061	Kit 2858 Repair kit	



### AR20242G Gymatic 3/B

For XM & RK up to 3650 PSI

- 3-5.5 GPM •3/4" GH filter inlet
- 3650 PSI maximum •3/8 MPT outlet
- 165°F maximum

Part	Product
5547	AR20242G w/bolts
3430	Kit 2611 O-ring kit
6214	Kit 2119 Bolt & Wash



### Gymatic VR35 3/B

For AR pumps up to 4000 PSI

- 5.0 GPM maximum •1/2 MPT inlet
- 4000 PSI maximum •3/8 MPT outlet
- 165°F. maximum

Part	Product
6092	AR21669 w/bolts
6097	AR22206 w/fixed injector
5276	Kit 2121 bolt & washers



### Unitrol Pressure Control

#### ZKW1 Bolt-on

General Pump: T9051, TT901, TT9061, TT9071, TT9051

- Built-in injector •165°F maximum
- 2-3 GPM •3/8FPT inlet
- 1600 PSI max. •1/4 MPT outlet

Part
3343



#### ZKW11L Bolt-on

GP models: T711, T911, T991, T9951, T9961

- Built-in injector •165°F maximum
- 3-4 GPM •1/2FPT inlet
- 1600 PSI max. •3/8MPT outlet

Part
3940



### Trapped Pressure Control Set

#### ZKW21 Bolt-on

GP: TT9351, TT9441, TT9971, all E-Z

- 3-4.5 GPM •165°F max
- 3000 PSI max •1/2FPT inlet
- 200°F. max. •3/8 MPT outlet

Part	Model
3344	W2.1 w/Injector
2830	W2.1SC NO injector



**ZKW21L Bolt-on**

GP: TS1011, TS1331, TS1511, TS1711



<b>Part</b>	Model
<b>3937</b>	W2.1L w/Injector
<b>3939</b>	W2.1L-SC no Injector

**ZKW Repair Kits**

<b>Part</b>	<b>Product</b>
<b>1743</b>	Kit 93 Rebuild
<b>3569</b>	Kit 94 Rebuild Kit



**ZK1 Flow Sensitive**

Soft start unloader offering gradual pressure increases, assuring safety for operator and pump



- 2 to 10 GPM
- 3600 PSI
- 165°F. max
- 3/8" FPT Inlet
- 3/8" MPT Outlet
- 1/2" MPT Bypass
- 1/4" MPT gauge ports

<b>Part</b>
<b>6703</b>

**K Series Flow Actuated**

- 1/2" MPT outlet on "E" series
- 3/8" FPT inlet 3/8 MPT outlet
- 3/4" MPT bypass

**K3 Series**

Part	Product	GPM	PSI
<b>1593</b>	K3.0	2.1-3.0	1450
<b>2347</b>	K3.0E	2.1-3.0	1450
<b>1594</b>	K3.1	3.0-4.2	1450
<b>1595</b>	K3.2	4.2-5.5	1450
<b>3146</b>	Kit 59		1450



**K5 Series**

<b>1597</b>	K5.0	2.1-3.0	3000
<b>1598</b>	K5.1	3.0-4.2	3000
<b>1494</b>	K5.1E	3.0-4.2	3000
<b>1599</b>	K5.2	4.2-6.6	3000
<b>1725</b>	K5.2E	4.2-6.6	3000
<b>1751</b>	K5.3	6.6-10	3000
<b>3132</b>	Kit 58		
<b>2404</b>	Bypass plate		



**K7 Series**

- 0-3500 PSI maximum
- 3/8" FPT inlet, & bypass
- 3/8" MPT outlet

Part	Model	GPM
<b>1220</b>	K7.0	2.1-3.0
<b>1393</b>	K7.1	3.0-4.2
<b>1394</b>	K7.2	4.2-6.6
<b>2301</b>	K7.2 w#1 orifice	
<b>1395</b>	K7.3	6.6-10
<b>1694</b>	Kit 70 Repair	



**VB75KDM Bolt-on**



GP EZ (44) series, 47, 50, and 63 series pumps. CAT 5CP, 5DX, 6DX



- 8.0 GPM
- 3650 PSI max
- 195° F. max

<b>Part</b>	Model
<b>6546</b>	VB75KDMN
<b>6552</b>	VB75KDM w/injector
<b>1332</b>	Bayonet bolt kit

**VB135KDM Bolt-on**

- 6.5 GPM maximum
- 2600 PSI maximum
- 195°F. maximum
- 3/8" FPT inlet
- 1/4" MPT outlet



<b>Part</b>	Model
<b>3340</b>	VB135KDM
<b>1566</b>	Bayonet bolt kit

**VB10 Reduced Pressure**

**BEST OF BOTH WORLDS.** VB-10 drops pressure at the gun to around 400 PSI in bypass



- Mount vertically
- 8 GPM maximum
- 3600 PSI maximum
- 195°F. maximum
- 3/8" FPT in, out & by

Part	Model	PSI
<b>4213</b>	VB-10	3600
<b>4517</b>	Repair kit	

**Flow Actuated Unloaders**



**Flow Actuated**

- 160° F. maximum
- 3/8" FPT inlet
- 3/8" MPT outlet
- 1/2 or 3/4 bypass



Part	Model	PSI	GPM
<b>1481</b>	22648	3000	1.5-4.0
<b>5739</b>	22650	3000	3.0-4.5
<b>1482</b>	22655	3000	3.0-5.5
<b>1588</b>	22654A	4000	3.5-4.8
<b>3577</b>	22666	kit	
<b>3576</b>	22695A	kit	22654

**Balanced Relief Valves**

Secondary safety device. Does not replace unloader.

**YBRV624**

- 6.3 GPM
- 2415 PSI
- 195°F. maximum
- 3/8FPT in/out



Part	Product	GPM	PSI	Inlet	Out
<b>3331</b>	YBRV624	6.3	2415	3/8F	3/8F
<b>4416</b>	YBRV5325	53	2600	3/4F	1/2F