

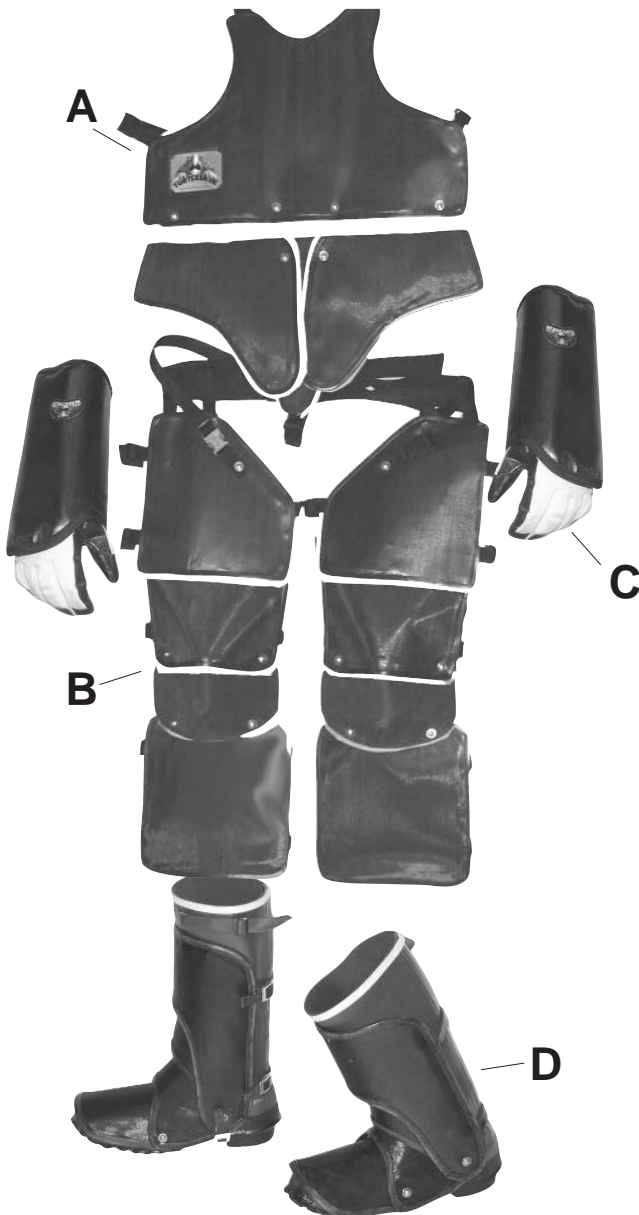
# SAFETY

40,000 PSI

## SAFETY APPAREL

TurtleSkin Water Armor is designed for UHP safety.

- Protection up to 2800 bar or 40,000 psi
- One size fits all money-saving design
- Modular design allows you to buy only what you need
- Replacement parts keep your suit safe longer
- Open back keeps you cooler longer
- Built-in knee pad for added productivity
- Lightweight suit protects without tiring the operator
- Hinged panel design gives greater flexibility



### Test Results

NO Penetration occurred beyond protective system with waterjet traveling at 8 ft/sec. (2.4 m/sec.), no closer than 3 in. (7.62 cm) at these conditions:

Pressure psi (bar)	Flow Rate gpm (lpm)	Orifice ID in (mm)	O° Nozzle Single Orifice: Material	Efficiency Factor
				$\frac{\left[ \frac{\text{GPM}/\# \text{ of orifices}}{\text{Orifice ID in}^2} \right]}{\sqrt{\text{Pressure psi}}}$
40,000 (2,800)	5.5 (21)	0.035 (0.889)	Sapphire	22.4
36,000 (2,500)	5 (19)	0.035 (0.889)	Sapphire	21.5
20,000 (1,400)	11 (42)	0.051 (1.295)	Tungsten Carbide	29.9
10,000 (700)	16 (61)	0.073 (1.854)	Tungsten Carbide	30

### COMPLETE TURTLESKIN GEAR\*

Item	Part Number	Description
A	28592	Upper Torso
B	28593	Chaps
C	28589	Gauntlets (Gloves not included)
D	27884	Gaiters (Boots not included)
A/B	27885	Upper Torso, Chaps

\*Suit replacement parts available. Contact factory.

# SAFETY

40,000 PSI

## SAFETY SUPPLIES & ACCESSORIES



Item	Part Number	Description
1	25625	Adjustable Hard Hat (Rain Through Outer Rim)
2	25620	Soft Frame, Fogless Goggles
3	25621	Face Shield with Mounting Bracket
4	26255	Face Shield Window Replacement
5	25617 - Size	Waterblast Approved Rain Suit (Specify Size: S, M, L, XL, or XXL)
6	26894	Shin/Foot Aluminum Guard
7	27168	Steel Toe, 16" Knee High Boots (Specify Shoe Size)
8	25624	Vinyl, 14 Gauntlet Gloves (Blue)
9	27019	Waterblast Safety Video in VHS
	28632	Waterblast Safety Video in DVD
	28633	Waterblast Safety Video in CD
10	26247	"Health Hazard" Caution Sign 8 1/2" x 11"
11	26253	"Restricted" Caution Sign 8 1/2" x 11"
12	25614	"Waterblasting" Danger Sign 8 1/2" x 11"
13	26444	"Caution: Waterblasting In Progress" Safety Tape 300 ft. Roll
14	28501	Safety Warning Sticker: "Always Wear Your Safety Gear"

# SAFETY

40,000/60,000PSI

## RUPTURE DISC HOLDERS

### Product Description

For protection from dangerous over-pressurization, rupture discs function in a waterblast system analogous to the function of fuses in an electrical circuit. When the system pressure exceeds that of the burst disc, the disc blows and allows water to flow out of the holder's cap, relieving the system of high pressure.

- May be used as primary and/or secondary relief device
- Tamper-resistant design
- Discs are quickly and easily replaceable
- Assembly components machined from high quality stainless steel

**NOTE:** Burst Disc not included with assembly.

### Disc Selection

For primary relief devices, select disc with burst pressure of approximately 1.2 times desired operating pressure.

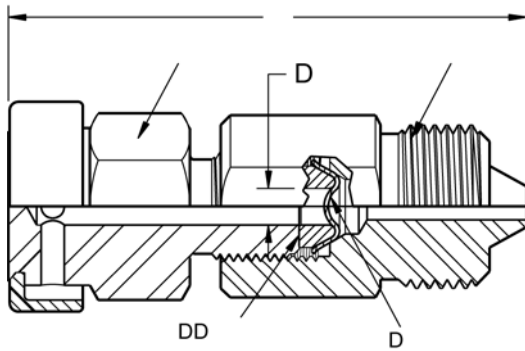
### Example

For operating pressure of 40,000 psi, desired burst pressure is  $40,000 \times 1.2 = 48,000$  psi. Select 50,000 psi Burst Disc, part number 27484.

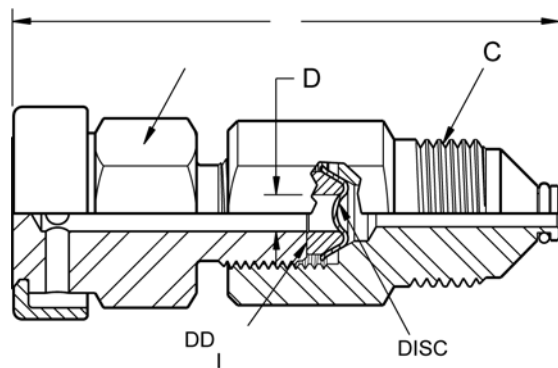
For secondary relief devices, select disc with burst pressure of approximately 1.4 times desired operating pressure.

### Example




For operating pressure of 40,000 psi, desired burst pressure is  $40,000 \times 1.4 = 56,000$  psi. Select 56,000 psi Burst Disc, part number 27485.



Part Number 53505



Part Number 54540

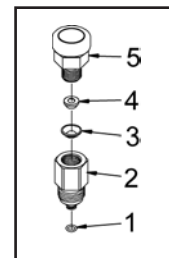
Part Number	Connection Type (C)	Overall Length (L)		Disc Blow Out Diameter (D)		Flats (H)		Maximum Working Pressure	
		in	mm	in	mm	in	mm	psi	bar
									
54540	9/16" HP Ports	3.56	90.4	.25	6.4	1.25	31.8	40,000	2,758
53505	Jetstream 40K Port	3.70	94.0	.25	6.4	1.25	31.8	40,000	2,758

### Burst Disc Chart

Part Number	Burst Disc Pressure	
	psi	bar
28575	35,000	2,414
28576	40,000	2,760
28615	45,000	3,103
27484	50,000	3,448
27485	56,000	3,860

### Replacement Parts

Item	Part Number	Description
1	27502	O-Ring
2	53576	Base, Jestream 40K Male Port
	54483	Base, 9/16" High Pressure Male
3	See Disc Chart	Rupture Disc
4	53578	Hold-Down Ring
5	53579	Cap



# SAFETY

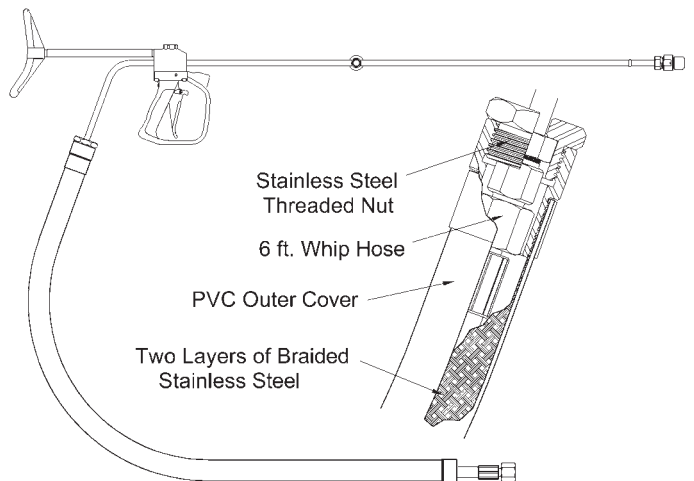
## 40,000 PSI

### SAFETY SHROUDS

#### Product Description

Designed for use with the 40,000 psi DuraSafe™ Series of control guns, a safety shroud assures operator protection in the event of a hose or end fitting failure by completely enclosing the hose and connection fittings. Assemblies include shroud, nut, and a six foot whip hose, or items can be purchased individually.

- Constructed of flexible, durable, and abrasion resistant thermoplastic around two layers of stainless steel braiding for maximum protection
- Easily fastened or removed from rear barrel of control gun by a stainless steel nut which fits over connection fittings
- Six foot lengths of whip hose designed as a cost-effective solution for ensuring operator safety; intended for replacing at regular intervals to ensure that the hose nearest the operator's body is always in good condition
- Contact factory for connection types other than those listed below



Part Number	Length		Hose Connection*	Hose I.D.		Replacement Parts			Maximum Operating Pressure	
	ft	m		in	mm	Shroud	Nut	Whip Hose**	psi	bar
54640	6	1.8	7/8" Type "M" Female	.32	8	28860	28861	27626-0064141	40,000	2,758
54645	6	1.8	9/16" Type "M" Female	.20	5	28860	28861	27731-0063939	40,600	2,800

\* See Page H-5 for a description of each connection type.

\*\* Whip Hoses listed do not have abrasion or burst shield guards and are not intended for use near an operator without a safety shroud.

### COVERED SAFETY WHIPS

#### Product Description

These six-foot hoses are designed for connection to 40,000 psi DuraSafe™ Series control gun.

- Crimped on steel-reinforced heavy-duty synthetic rubber burst shield guard for protection in the event of hose failure
- Intended for replacement at specified intervals to ensure that a questionable hose is never near the operator's body
- Contact factory for hose connection types other than those listed below



Part Number	Length		Hose Connection*	Hose I.D.		Maximum Operating Pressure	
	ft	m		in	mm	psi	bar
27626-00641412	6	1.8	7/8" Type "M" Female	.32	8	40,000	2,758
27731-00639392	6	1.8	9/16" Type "M" Female	.20	5	40,600	2,800

\* See Page H-5 for a description of each connection type.

### Related Items

**DURASAFE™ CONTROL GUNS**— See Control Guns & Valves, Pages B-10 & 11

**HOSES** — See Hoses & Lances, Pages C-1 & 3

**FITTINGS** — See Fittings, Section E