BULLETIN

NO.: 23-022

DATE: February 10, 2023

TO: All Personnel

FROM: James Gaboury, Deputy Fire Chief, Logistics Division

SUBJECT: Updated MaxiForce Air Bag Systems

The Logistics Division has purchased nine sets of updated MaxiForce Air Bag systems by Paratech with the intention of phasing out the older systems currently in place on front line apparatus.

Description: The MaxiForce Master Control Kit operates similar to the existing air bag systems currently in use by the SDFD. There are only a few minor differences that will provide an easier, more versatile option.

Differences:

- The working air pressures on the new system are set and do not require adjustment. The pressure reducer functions at 215PSI on the outlet side, and the pressure relief valves are pre-set to 165PSI. No adjustments are required.
- The new system comes with five 16' hoses for multiple bag deployment
- The KPI-22 bag has been removed from the compliment (KPI 5, 12, 17).
- With the new "Y Connector Fittings" users can now perform a four-bag lifting operation.
    - Operation can be done controlling both bottom bags on one Deadman port and both top bags on the other, or in a Daisy Chain formation.
    - See video from Paratech for further explanation.
        - https://www.youtube.com/watch?app=desktop&v=t35wO6hToyc
- The bottle connection point on the pressure reducer is threaded. User can incorporate the Scott Adapter Tool currently housed on frontline apparatus to accommodate the quick connect fitting on our SCBA cylinders (see below).

Questions about the MaxiForce Master Control system can be directed to the Logistics Division or by referencing the spec sheets available here.

SPIEL #10 AIRBAGS

1. DESCRIPTION: MaxiForce Master Force Master Control Kit Air Bag Systems are a multi-application inflation system

2. USAGE: Lifting and displacement of heavy rigid objects

3. SPECIFICATIONS:
   - 3.1. Piston type high pressure regulator:
     1. Reduces inlet pressure from 4500 PSI to 215 PSI
     2. Relief valve is factory set at 165 PSI
   - 3.2. Dual (Dead man) Safety Relief and Control:
     1. Single input/dual output
   - 3.3. Interconnecting Hoses:
     1. Five 16' sections of hose
     2. Color coded & interchangeable
   - 3.4. Airbags:
     1. Neoprene, reinforced with three layers per side of Kevlar reinforced fabric
     2. Sizes range from 6 x 6 up to 36 x 36 inches
     3. Common Bag Specifications:

	Model	Size	Capacity (tons)	Height
a.	KPI 5	10” x 10”	5.4	5.4”
b.	KPI-12	15" x 15"	13.7	8.2"
c.	KPI-17	15" x 21"	19	8.9"

4. ADDITIONAL EQUIPMENT:
   - 4.1. Cribbing
   - 4.2. Crowbar
   - 4.3. Scott Adaptor Tool for Quick Connect SCBA fitting

5. SAFETY PRECAUTIONS:
   - 5.1. Wear full protective safety gear and eye protection
   - 5.2. Never stack more than two bags

DESCRIPTION:			
MaxiForce Master Control Air Bags			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF2A-4-1	**4-1**	**N/A**	**N/A**

PERFORMANCE MEASURES:	**PASS**	**FAIL**
Air Bags Spiel.		
Set Up		
Connect the high-pressure regulator to the air bottle.		
Slowly open cylinder fully.		
Connect pressure regulator to the Dual Deadman controller.		
Connect air bag to Dual Deadman controller (in-line relief valve on bag).		
Open valves starting at pressure relief valve and working up to pressure relief valves on air bag side of Dual Deadman controller		
Stacked Lifts		
The larger bag shall always be on the bottom.		
Stacked bags must be centered under object to be moved.		
Physically inspect that there are no sharp edges contacting bag.		
Alternate partially inflating bottom bag, then partially inflating top bag.		
Always crib as object is being raised/lowered.		
Partially deflate the top bag first, then partially deflate lower bag to lower.		
Safety Considerations		
Personnel involved in air bag operations should always be alert for load shifts.		
Personnel should work in a squatting position with defined escape route.		
Loads must be securely cribbed prior to working under a moved or lifted load.		
Never place hands under load during airbag operations.		
Review cribbing Information in Spiel Book.		
See Drill Manual **Chapter 5.**		