VECTOR™
Hydraulic Pump

HYTORC

The World's Most Trusted Industrial Bolting Systems

Vector Family Of Pumps

One Port

MINI

Four Port

Global Ready

VOLTAGES	TORQUE UNITS	PRESSURE UNITS	TEMPERATURE UNITS	LANGUAGES
115V	Ft/LBS.	PSI	FAHRENHEIT (F)	GERMAN
230V	NM	BAR	CELSIUS (C)	ENGLISH
400V	KPM		KELVIN (K)	FRENCH
				SPANISH
				DUTCH
				PORTUGUESE
				ITALIAN
				RUSSIAN
				TURKISH

The first time the pump is commissioned the user is prompted to enter setup information (language, date, time, torque and units).

Modular

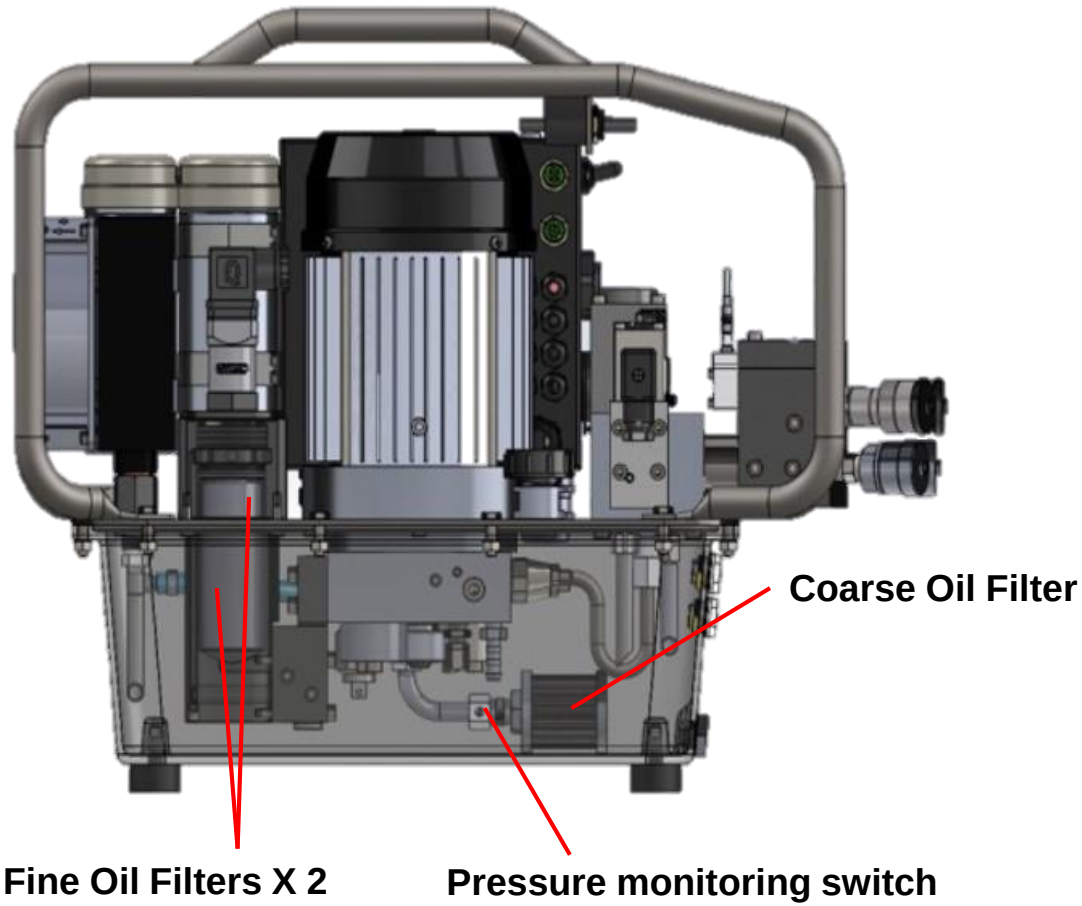
Base Model	4 Port Manual	1 Port Fully Automatic	4 Port Fully Automatic	Documentation (add software)	Bluetooth*	Torque & Angle*
1 Port Manual VECTOR-T1	✓ VECTOR-T4	✓ VECTOR-FA1	✓ VECTOR-FA4	✓ VECTOR-FA1-DOC VECTOR-FA4-DOC	✓ VECTOR-FA1-DOC-BLU VECTOR-FA4-DOC-BLU	✓ VECTOR-FA1-TA
4 Port Manual VECTOR-T4		✓ VECTOR-FA1	✓ VECTOR-FA4	✓ VECTOR-FA4-DOC	✓ VECTOR-FA4-DOC-BLU	
1 Port Fully Automatic VECTOR-FA1			✓ VECTOR-FA4	✓ VECTOR-FA4-DOC	✓ VECTOR-FA1-DOC-BLU VECTOR-FA4-DOC-BLU	✓ VECTOR-FA1-TA
4 Port Fully Automatic VECTOR-FA4				✓ VECTOR-FA4-DOC	✓ VECTOR-FA4-DOC-BLU	

UPGRADABLE

UPGRADABLE

*FUTURE UPGRADES

Familiarization and Setup



3 Oil Filters Monitored By The Pump

- 100 Micron (100µ) Coarse Filter
  - Monitored by a pressure sensor
- 20 Micron (20µ) Fine Filter
  - Monitored by a 500 hour timer
- 3 Micron (3µ) Fine Filter
  - Monitored by a 500 hour timer

32 Grade Oil is Recommend

Familiarization and Setup

LCD Screen

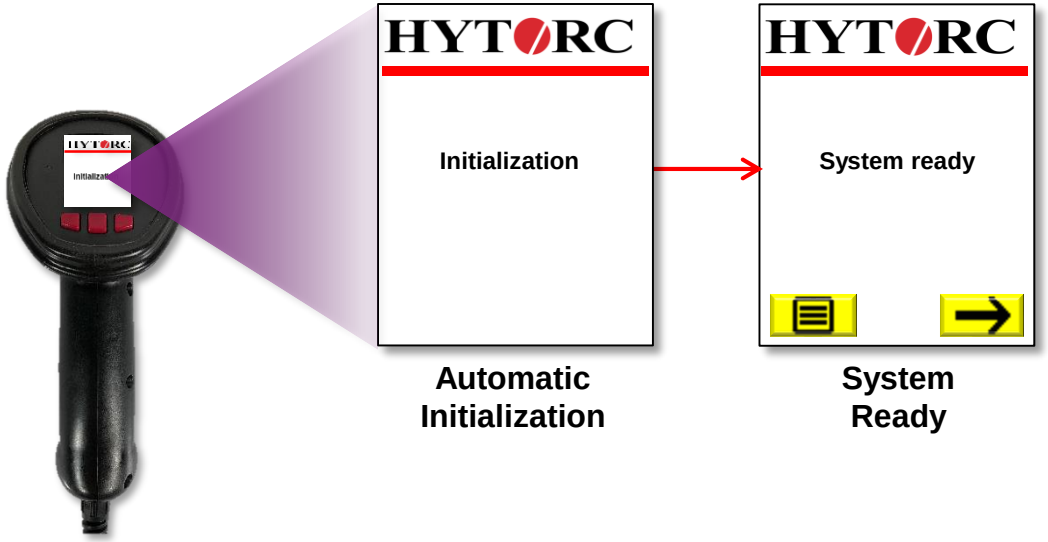
3 Red Buttons

1 Green Button

LED Status Indicator

Power Switch

Familiarization and Setup



- Upon successful initialization the beeper sounds and LED shows solid green.
- Once initial setup is complete the display shows “System Ready”.
- Press → to start a new bolting job
- Press ☰ to access menu. (Password Required)

- Operator Password:00000000 (That’s 8 Zero’s!)
- Supervisor Password:87654321

ICON KEY

- ↑ Upward- Increase value
- ↓ Downward- Decrease value
- ← Return- Scroll Left
- → Continue- Scroll Right
- ↩ One menu level up
- ☰ Open the Settings menu (password required)
- 🗑 Delete entry
- ▲ Release Mode
- Change Torque Value
- ✓ Confirm
- ✕ Abort
- Stop Stop the pump motor

Getting Started

Fully Automatic Setup

Start

HYTORC
System Ready

HYTORC
Mode
Manual
Fully Automatic

HYTORC
Documentation
Yes
No

HYTORC
Tool Select
AVANTI

HYTORC
Tool Type
AVANTI 3

HYTORC
Set torque
1243 lb-ft.

HYTORC
Press trigger to start system measuring.
Caution: Put tools on the ground!

HYTORC
Hold Trigger!
System measuring in progress.
20 %
Stop Stop Stop

HYTORC
System measuring successful. Release trigger.
100 %
Stop Stop Stop

HYTORC
Place tools onto the bolts.
Stop Stop Stop

HYTORC
Place tools onto the bolts.

HYTORC
Bolting status
Tool 1: in progress
Tool 2: in progress
Stop Stop Stop

HYTORC
Bolting status
Tool 1: Checking
Tool 2: in progress
Stop Stop Stop

HYTORC
Bolting status
Tool 1: Checking
Tool 2: Checking
Stop Stop Stop

Release Mode- Pump operates as manual pump so you can unlock the wrench from the application if it gets stuck.

HYTORC
Bolting done
Release trigger.
Stop Stop Stop

Finish

Documentation

```
*****************************************************************************
*                                                                           *
*                          H Y T O R C - D O C                              *
*                                                                           *
*****************************************************************************

Job ID:                         AB01                                    (M)

Part ID:                        FLANGE 33                               (M)

Number of bolts:                4 bolts                                 (M)

Date:                           02/27/2019

Time:                           09:55:55

Employee ID:                    (1) JJ68                                (M)

Torque:                         300 Ft.Lbs                              (M)

Tool 1:                         STEALTH 2                               (M)
SN tool:                        S2F1831-43                              (M)

Tool 2:                         STEALTH 2                               (M)
SN tool:                        S2F1831-47                              (M)

Tool 3:                         STEALTH 2                               (M)
SN tool:                        S2F1831-76                              (M)

Tool 4:                         STEALTH 2                               (M)
SN tool:                        S2F1831-90                              (M)

Operation mode:                 Fully automatic                         (M)

Serial number of the system:    2128680002   (v1.03.02)

Tolerance range torque:         +/- 3 %

*****************************************************************************

Curr.no     Initial torque     Final torque     Status     Tightening strokes

   1          278 Ft.Lbs        291 Ft.Lbs       okay              4
   2          278 Ft.Lbs        291 Ft.Lbs       okay              4
   3          278 Ft.Lbs        291 Ft.Lbs       okay              5
   4          278 Ft.Lbs        291 Ft.Lbs       okay              3

*****************************************************************************

Status okay: The final torque is within the specified tolerance.
```

USB Drive (E:) › Reports › Test Flange

Name	Date modified	Type	Size
Report_Test Flange_4 bolt test_202.csv	2/6/2020 10:00 AM	Microsoft Excel C...	1 KB
Report_Test Flange_4 bolt test_20200206_.json	2/6/2020 10:00 AM	JSON File	2 KB
Report_Test Flange_4 bolt test_20200206_102921.html	2/6/2020 10:00 AM	Chrome HTML Do...	2 KB
Report_Test Flange_4 bolt test_20200206_102921.rpe	2/6/2020 10:00 AM	RPE File	3 KB
Report_Test Flange_4 bolt test_20200206_102921.txt	2/6/2020 10:00 AM	Text Document	3 KB

VECTOR PUMP FILE EXPORT

- 5 File Types Generated
- All Exported, No Need To Choose
- All Put In Single Folder

REPORT NAMING CONVENTION

“Report” Job ID Part ID YearMonthDay Time

Documentation

```
*****************************************************************************
*                                                                           *
*                    H Y T O R C - D O C                                    *
*                                                                           *
*****************************************************************************
```

Job ID:	Test job	(M)
Part ID:	Flange_33	(M)
Number of bolts:	12 bolts	(M)
Date:	02/06/2020	
Time:	10:29:21	
Employee ID:	John Smith_68	(M)
Torque:	1243 Ft.Lbs	(M)
Tool 1:	AVANTI 3	(M)
SN tool:	XL 43-66	(M)
Tool 2:	AVANTI 3	(M)
SN tool:	XL 43-76	(M)
Tool 3:	AVANTI 3	(M)
SN tool:	XL 43-77	(M)
Tool 4:	AVANTI 3	(M)
SN tool:	XL 43-83	(M)
Operation mode:	Fully automatic	(M)

Serial number of the system: 2153300001 (v1.04.13)

Tolerance range torque: +/- 3 %

*****

No.	I. torque	E. torque	Status	Strokes
1	604 Ft.Lbs	1243 Ft.Lbs	okay	5
2	604 Ft.Lbs	1250 Ft.Lbs	okay	5
3	683 Ft.Lbs	1241 Ft.Lbs	okay	4
4	604 Ft.Lbs	1239 Ft.Lbs	okay	5
5	603 Ft.Lbs	1243 Ft.Lbs	okay	4
6	606 Ft.Lbs	1238 Ft.Lbs	okay	4
7	615 Ft.Lbs	1243 Ft.Lbs	okay	5
8	607 Ft.Lbs	1251 Ft.Lbs	okay	4
9	604 Ft.Lbs	1247 Ft.Lbs	okay	4
10	606 Ft.Lbs	1260 Ft.Lbs	okay	4
11	603 Ft.Lbs	1257 Ft.Lbs	okay	5
12	602 Ft.Lbs	1248 Ft.Lbs	okay	4

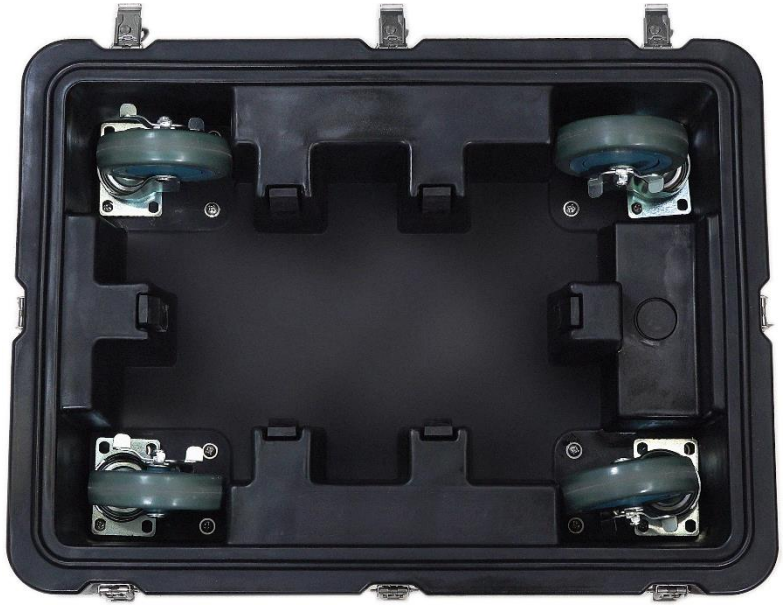
*****

Status okay: The final torque is within the specified tolerance.

*****

No. : Curr.no
I. torque : Initial torque
E. torque : Final torque
Status : Status

Storage Case



Key Feature

- Removable Wheels
- Pump Operation While in Case
- Stackable
- Durable

CURRENTLY AVAILABLE

Looking Ahead

Kit Requires Installation

Coming Soon!!!

VECTOR SCANNER

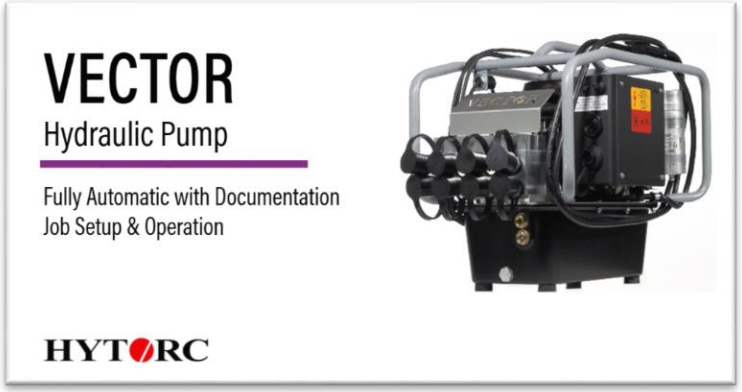
Works With:

- VECTOR FA DOC Pump
- VECTOR MINI FA DOC Pump

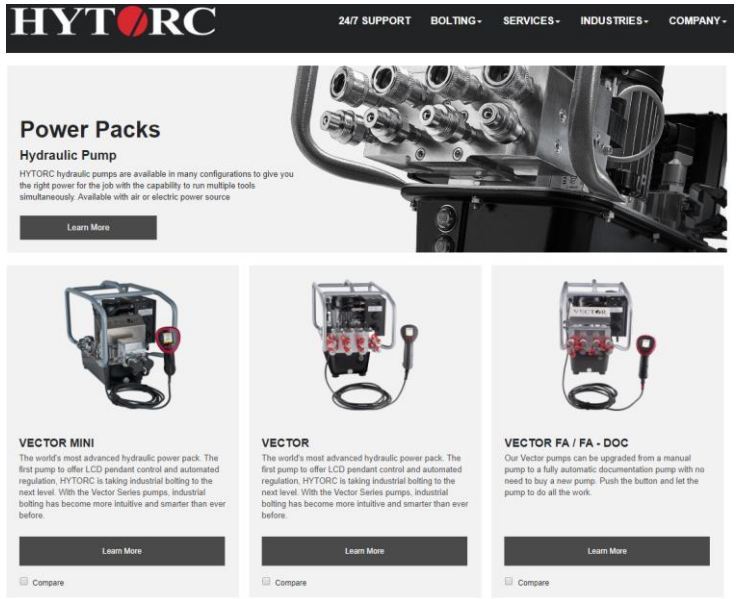
Sale:

- New VECTOR pump orders
- Current VECTOR pump owners

Additional Resources



HYTORC Website



Promotional Videos

Training Videos

YouTube

Thank You

HYTORC®

12420 Texaco Rd.
Houston, TX 77013

713-453-6677

sales@hytorctexas.com