



Model: TM120 Serial #: NA	Dec. 11, 2019
Product Bulletin # TM-029 v 1.0	

## TM120 v1.3 Upgrade Available

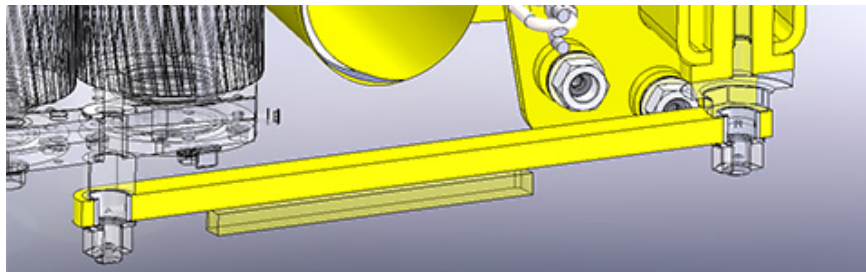
Canrig has issued a kit to upgrade the Canrig® Torq-Matic™ Automated Wrench from version 1.2 to version 1.3. This upgrade includes several improvements on performance and reliability. See below for a summary of new features. Contact your Account Representative or RIGLINE 24/7™ to order this kit.

Qty	Canrig P/N	Description
1	AY51476	KIT, UPGRADE, TM120 V1.2 TO V1.3

## Implemented Upgrades

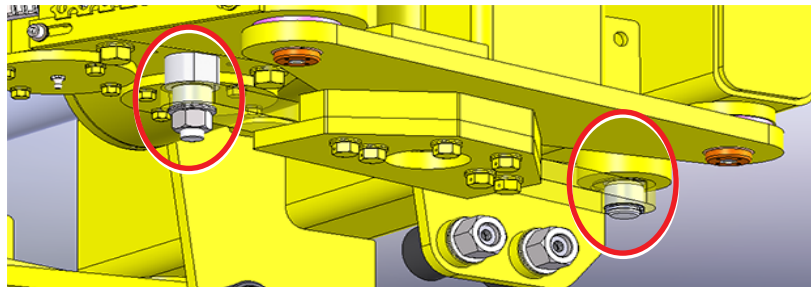
### 1. Spinner Assembly

#### 1.1. Link Arm



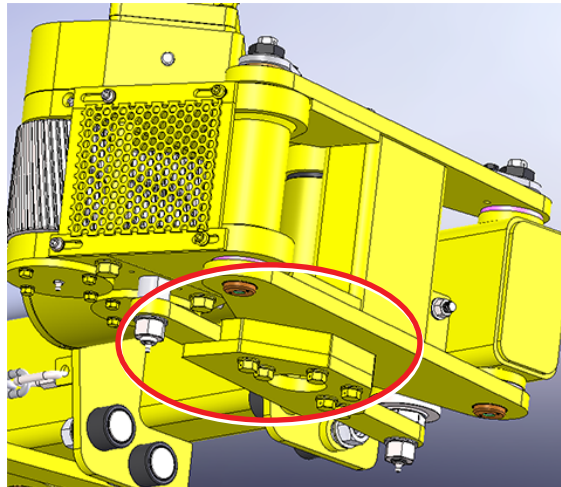
- Changed material to A514 GR B to reduce buckling.

#### 1.2. Link Arm Pins



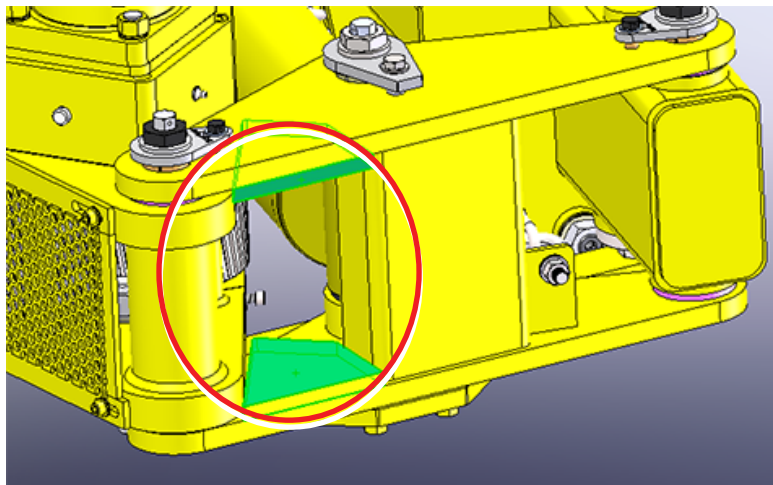
- Replaced threaded pin with a straight drop pin that is installed from the top of the traveling frame.
- Pin material upgraded to higher yield strength steel. Rear pin redesigned to eliminate the many stress concentration points. Pin is now straight.

### 1.3. Link Arm Support Plate



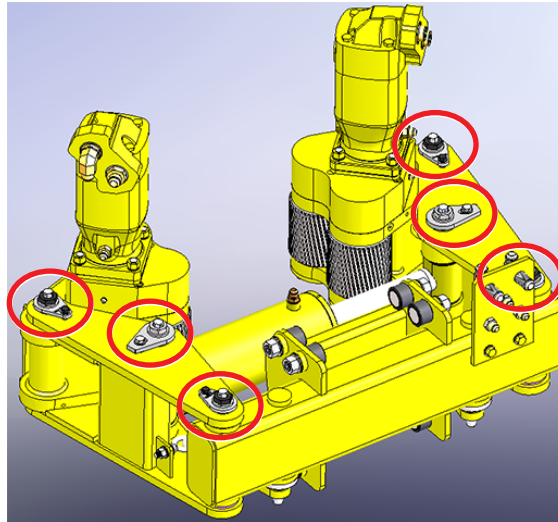
- Added support plate to reinforce link arm and mitigate buckling.

### 1.4. Side Arm Stopping Plate



- Added a mechanical stop to prevent the spinner roller frame from colliding with hydraulic cylinder.

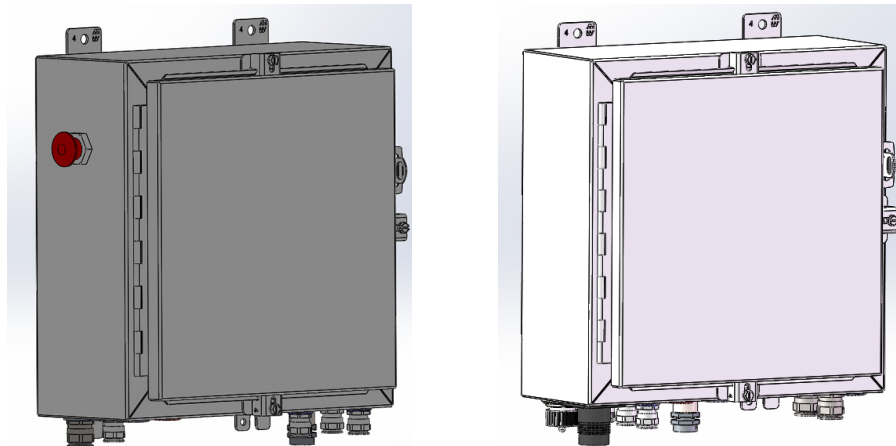
### 1.5. Pins



- Added Bondura pins to prevent weldment deformation and pin failures.
- Added greaseless polygon bushings (No lubrication needed).

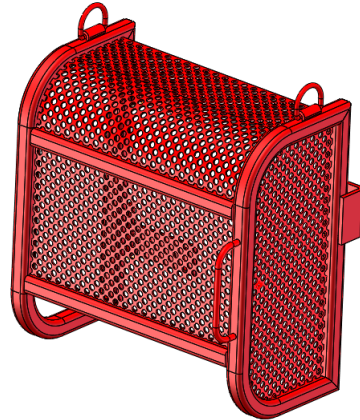
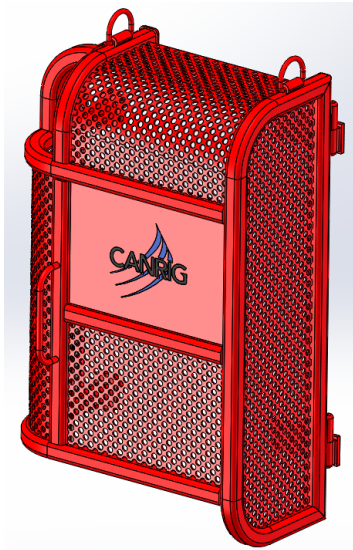
## 2. Remote I/O and Arm Box Guard

### 2.1. Remote I/O



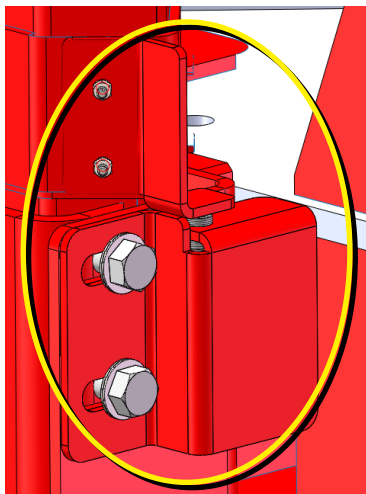
- Eliminated 37-pin cable to reduce failure and troubleshooting time.
- Added additional functionality/automation.

## 2.2. Box Guard



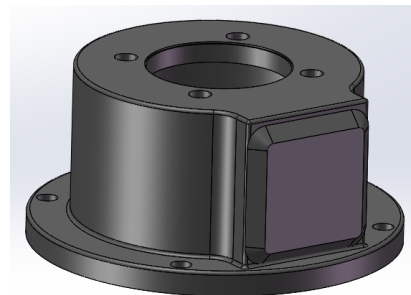
- Arm box guard re-designed to be more robust and serviceable.
- Created second guard for new remote I/O setup.

## 3. Proximity Sensor



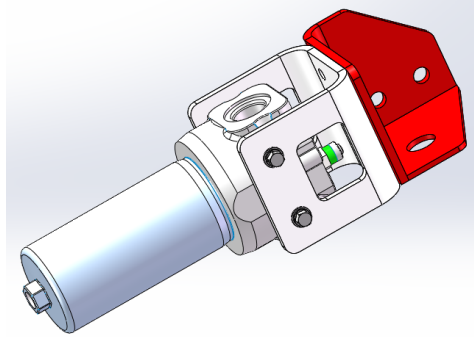
- Improved proximity sensor cover and target bar design.

## 4. Encoder Cap



- Changed material from composite to metal (AISI 1045) to reduce encoder failure due to cap breaking.

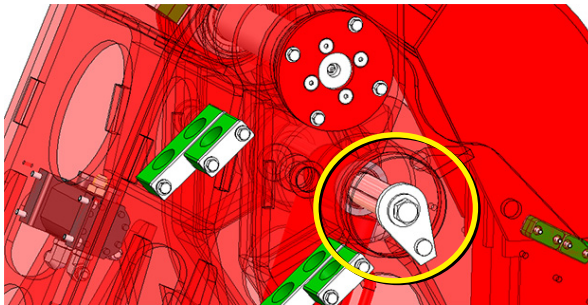
## 5. Non-Bypass Filter



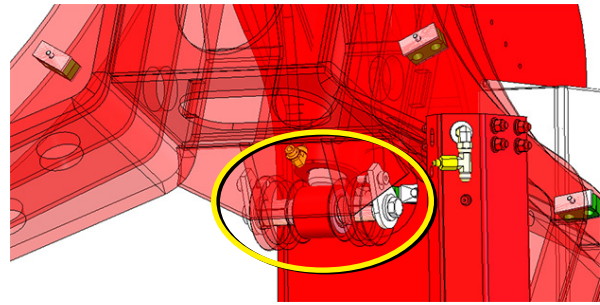
- Changed to a non-bypass filter to avoid contamination in the TM hydraulic system.

## 6. Arm Assembly

### 6.1. Rear Bondura Pin



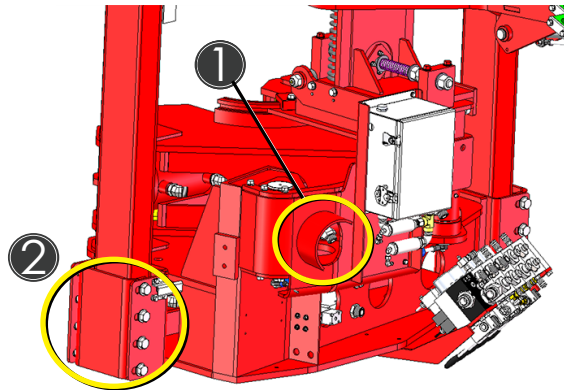
### 6.2. Front Bondura Pin



- Changed to Bondura pin. New pin is stronger, larger, and improves serviceability.

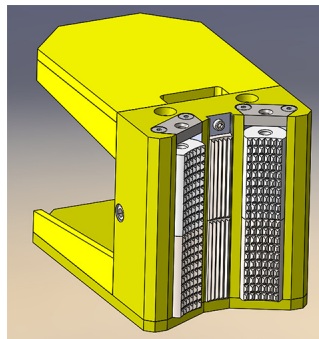
## 7. Torque Assembly

### 7.1. Jeep Support Bracket and Vertical Lift Mount



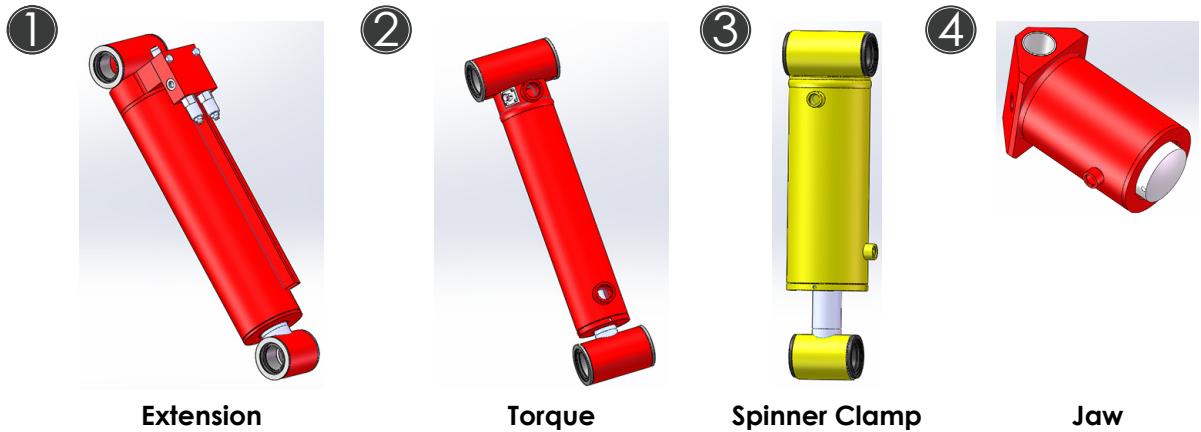
1. Added protective guard for hydraulic fitting and jeep support bracket.
2. Updated vertical mount and hardware to retain center of gravity on torque assembly.

### 7.2. Jaw Assembly



- Using TM80 v1.3 improved die retainment for longer life.

## 8. Cylinders



- Integrated internal LVDT and counter-balance valve into extension cylinder (1).
- Integrated internal LVDT for torque cylinder (1 & 2).
- Added greaseless polygon bushings w/wiper seals (all cylinders).
- Improved reliability (all cylinders).