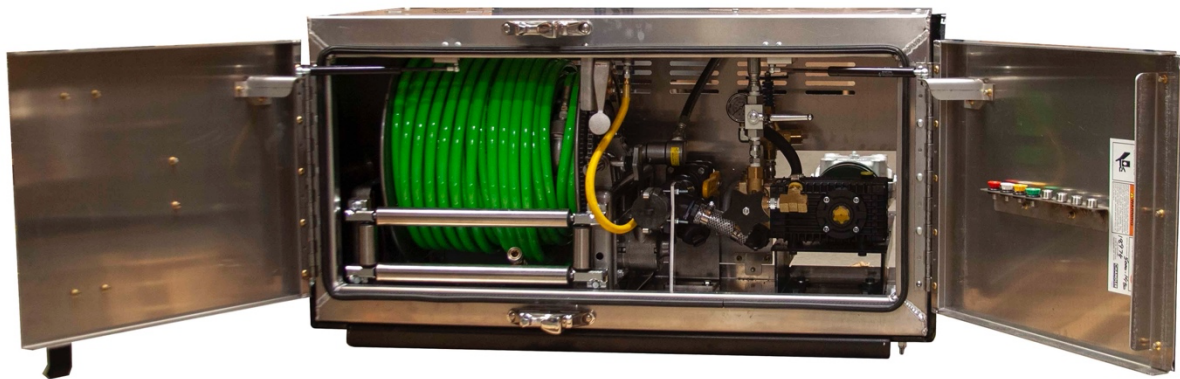




# Owner's Manual

## Jetter Box



**Chandler Equipment, Inc**

4180 W Sunset Ave

Springdale, AR 72762

(479) 751-9771

[www.chandlertruckaccessories.com](http://www.chandlertruckaccessories.com)

## Features

- 24" Deep x 24" Tall x 48" Wide Polished Aluminum Toolbox
- 10.2 GPM @ 3000 PSI Pump with Pulsator
- Air-Powered Retract Hose Reel
- 200 feet of 1/2" 4000 PSI Jet Hose
- ENZ USA Standard Flushing Nozzle w/ Replaceable Ceramic Inserts w/ Optional Forward Jet
- Washdown Gun with 0°, 15°, 25°, & 40° Nozzles
- Tool Rack w/ (2) Adjustable Wrenches

## Component Specifications

- **General Pump TSF2221**
  - Maximum Flow 10 GPM
  - Maximum Pressure 3000 PSI
  - Maximum Operating Speed 1750 RPM
  - Maximum Inlet Vacuum 2.6" Hg
  - Maximum Fluid Temp 165° F
  - Crankcase Oil Capacity 14.0 oz
  - Oil Type SAE 30 Non-Detergent
  - Rotation Clockwise
- **Hannay Hose Reel**
  - Capacity 200 ft of 1/2" Hose
  - Maximum Pressure 3000 PSI
  - Power Rewind Compressed Air
- **Gearbox Drive**
  - Ratio 1:1
  - Shaft Size 1-1/4"
  - Key Size 1/4"
  - Oil Capacity 28 oz.
  - Oil Type 80-W90

## Toolbox Jetter Installation

1. Mount the toolbox jetter to vehicle frame using minimum (3) ½” Grade 5 bolts per bracket.
2. Loosen the bolts on the bottom of the mounting brackets. Slide toolbox in or out to the desired location. Tighten bolts.
3. Connect the hose barb on the inlet manifold to a water supply reservoir (supplied by installer) using 1-1/4” ID or larger hose.
  - a. Bottom of reservoir can be up to 9 ft. below the pump inlet. However, the pump will not prime if the water level is below the pump inlet.
4. Connect the return port to the water supply reservoir using 3/4” ID or larger hose.
5. Find a 3/8” or larger plug in an air tank on the vehicle the toolbox jetter is installed on.
6. Remove the plug and install a nipple and the supplied Pressure Protection Valve (PPV).

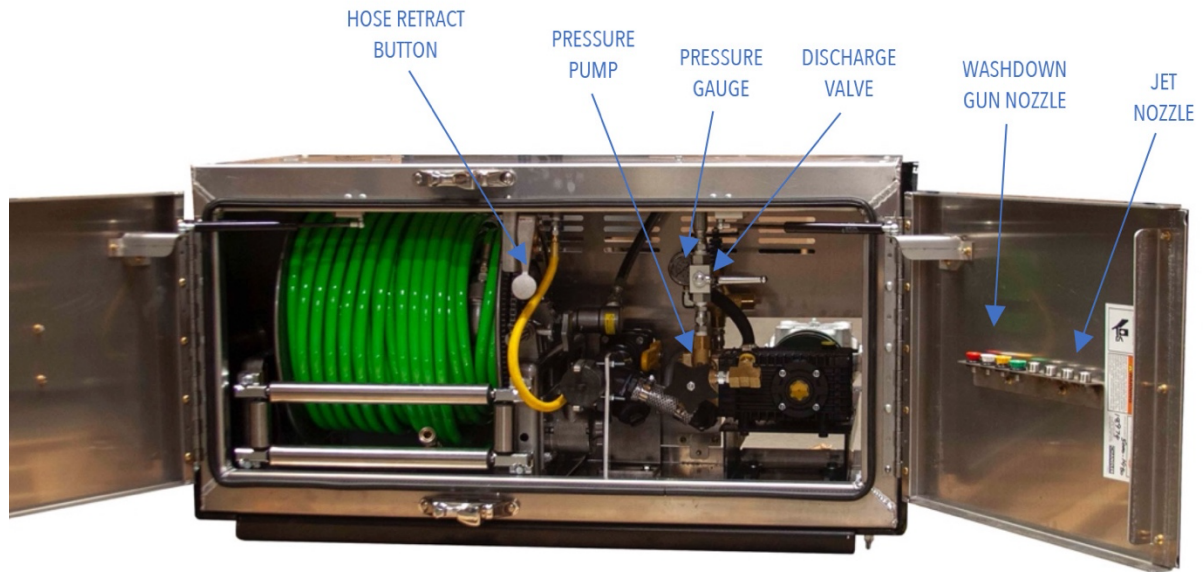
**! CAUTION !**

Do NOT install hose or tubing between the PPV and the air tank!  
Loss of braking ability will occur if the hose or tubing would fail.

7. Connect the PPV to the bottom port of the reel control valve using 3/8” ID or larger hose rated for at least 150 PSI or ½” OD or larger DOT tubing.

## Gearbox Drive Installation

1. Connect the gearbox to the power source using a balanced 1310 series driveshaft.



## Operation

1. Install jet nozzle onto jet hose, manually pull desired amount of hose off the reel and place the hose into the pipe to be cleaned.
2. Close discharge valve.
3. Turn primary unloader crank counter-clockwise to decrease pressure.
4. Open water inlet valve.
5. Engage PTO and throttle up engine to appropriate speed.
6. Open discharge valve. Water will start flowing to the jet nozzle.
7. Turn primary unloader crank clockwise to increase pressure and increase flow to the jet nozzle. Continue to turn until pressure is 3000 PSI.
8. Open pulsation valve to get nozzle to pass a resistance. Close the valve after the nozzle passes.
9. When jetting is complete, turn the primary unloader crank counter-clockwise to reduce pressure to 1000 PSI. Close the discharge valve.
10. Remove and return jet nozzle to the nozzle rack.
11. Press hose reel control valve paddle to wrap jet hose onto reel.

### **! CAUTION !**

Hose retracts quickly! Keep fingers and loose clothing away from reel! Reel speed can be increased or decreased with the air restrictor on the air motor exhaust port.

12. Close water inlet valve.
13. Disengage PTO

## Washdown

1. Thread washdown gun quick coupler onto jet hose. Connect washdown gun and install appropriate nozzle.
2. Turn primary unloader crank counter-clockwise to decrease pressure.
3. Open water inlet valve.
4. Engage PTO and throttle up engine to appropriate speed.
5. Pull trigger and turn primary unloader crank clockwise to increase pressure. Continue to turn until pressure is 3000 PSI. Release trigger.
6. Proceed with washing.
7. When washing is complete, crank the pressure down and close discharge valve.
8. Pull the trigger to release pressure. Remove the gun, nozzle, and coupler and return to the nozzle rack.
9. Press Hose Reel control valve paddle to wrap jet hose onto reel.

**! CAUTION !**

Hose retracts quickly! Keep fingers and loose clothing away from reel! Reel speed can be increased or decreased with the air restrictor on the air motor exhaust port.

10. Close water inlet valve.
11. Disengage PTO.

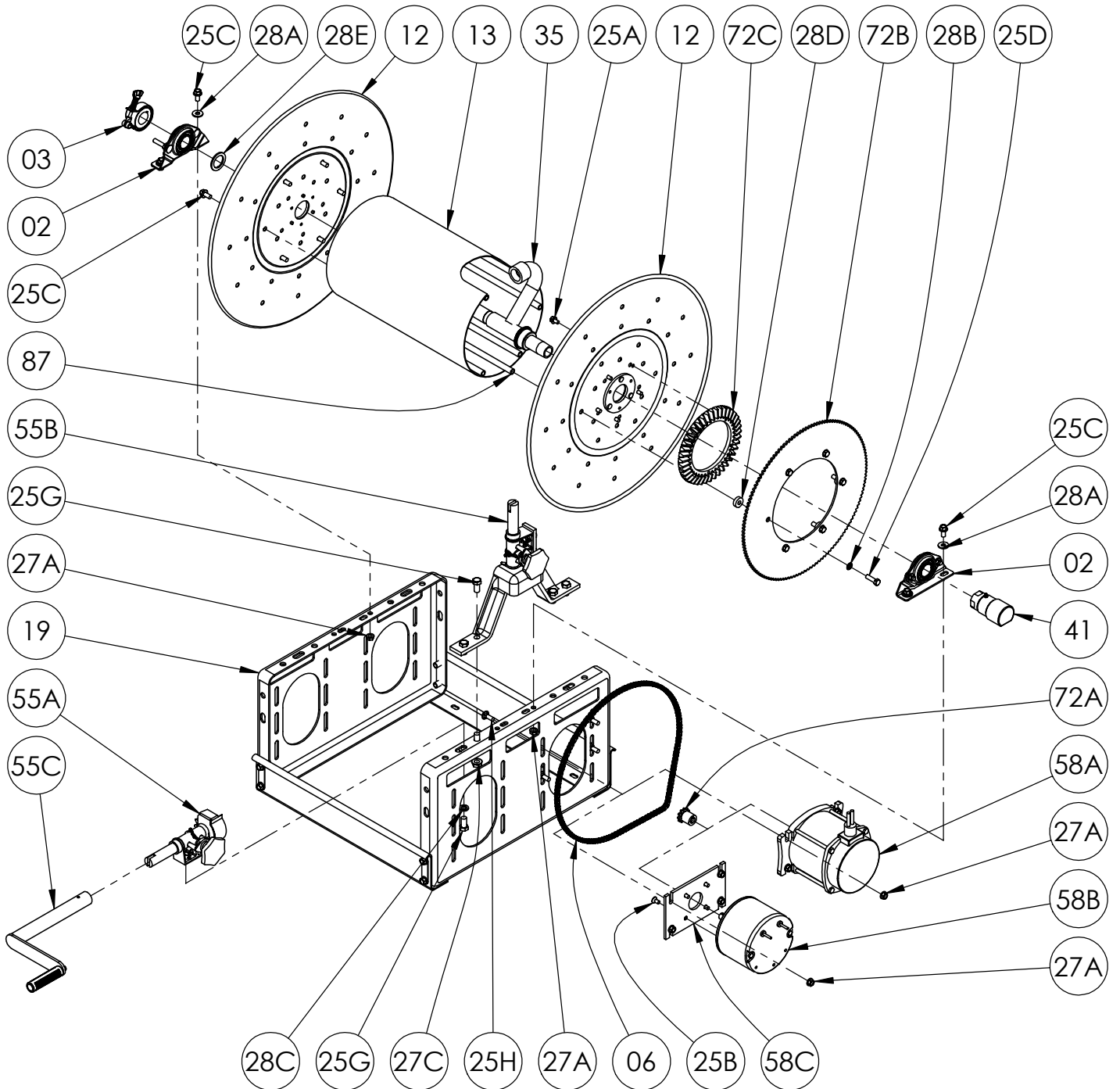
## Trouble Shooting

- Low Water Pressure
  - Pump speed is too slow - Check drive system. Pump should run at 1750 RPM.
  - Inlet filter plugged - remove and clean.
  - Insufficient water supply - disassemble fittings & reapply thread sealant.
  - Pulsator engaged - close pulsation valve.
  - Missing insert in jet nozzle - replace nozzle or insert.
- Gradual loss of water pressure
  - Jet nozzle inserts worn - replace nozzle or inserts.
- Reel will not retract
  - Air motor exhaust restricted too much - open restrictor.
  - Air pressure on vehicle is low - allow pressure to build to above 80 PSI.
- Reel continues to free-wheel after hose is pulled off.
  - Turn reel brake knob clockwise to increase reel drag.
- See pump service manual for complete pump troubleshooting instructions

## Service & Maintenance

- Daily
  - Check Engine Oil Level - Top off as needed.
  - Check Water Pump Oil Level - Top off as needed.
- Monthly
  - Inspect and lubricate the hose reel chain.
  - Grease reel swivel joint.
  - Inspect jet hose for damaged areas. Replace as needed.
- Change Water Pump Oil after the first 50 hours and every 500 hours or every 3 months thereafter.
- See Jet Nozzle Manual for Maintenance Procedures

**ISO 84**  
**PARTS LIST**  
**1" HOSE REELS**





**PARTS LIST  
ISO 84  
1"Hose Reels**

**When Ordering Parts  
BE SURE TO SPECIFY COMPLETE MODEL NUMBER and SERIAL NUMBER OF REEL  
USE PART NUMBER!**

<u>Item No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>
02	1" Self Aligning Bearing Complete (See ISO-210 for Parts).....	9902.1400	2
03	Comet Brake Bearing Mounted Strap Brake Complete (See ISO-212 for Parts).....	9947.0090	1
06	#35 Chain .....	Specify Model	1
12	Disc Assembly .....	Specify Model/Serial #	2
13	10-1/2" Diameter Drum ~Spec Model.....	9905.3131	1
19	Small Steel Pressed Frame Ass'y (Up to 23-24) ~Spec Model (Not Shown) .....	9908.2000	1
19	Large Steel Pressed Frame Ass'y (Up to 30-31)~Spec Model .....	9908.3000	1
25A	5/16"-18 x 1/2" Spinlock Bolt (For H26 Ring Gear) .....	9904.2158	5
25B	5/16"-18 x 5/8" Hex Flat Head Socket Screw .....	9958.0027	4
25C	3/8"-16 x 3/4" Spinlock Bolt .....	9904.2201	10 or 16
25D	3/8"-16 x 1-1/4" Hex Head Bolt (For 138T35 Sprocket) .....	9904.1203	6
25E	3/8"-16 x 1" Spinlock Bolt (For H28 Ring Gear) (Not Shown) .....	9904.2202	6
25F	3/8"-16 x 1" Button Socket Head Cap Screw (For 180T35 Sprocket) (Not Shown) .....	9904.9202	6
25G	1/2"-13 x 1" Hex Head Bolt.....	9904.1402	2 or 4
25H	3/8"-16 x 1" Carriage Bolt.....	9904.0200	4
27A	3/8"-16 Spinlock Nut.....	9904.6200	8 or 14
27B	3/8" Hex Head Jam Nut (For 180T35 Sprocket) (Not Shown).....	9965.0012	6
27C	1/2"-13 Spinlock Nut (For Vertical Rewind) .....	9904.5400	4
28A	3/8" Flat Washer .....	9954.0007	4
28B	3/8" Internal Tooth Washer (For 138T35 Sprocket) .....	9954.0095	6
28C	1/2" Lock Washer .....	9954.0030	2
28D	Sprocket Spacer (5/16" Thick).....	9954.0017	6
28E	1" Hub Spacer Washer .....	9954.0021	As Needed
35	1" Hub Assembly ~ Specify Model/Serial Number.....	9901.1600	1
41	1" FNPT Full Flow Super Swivel Joint.....	9929.8552	1
55A	Manual Rewind Assy W/H-27 (For Reels Up to 25-26 Series) (See ISO-209 for Parts) .....	9914.0200	1
55A	Manual Rewind Assy W/ H-29 (For Reels Over 25-26) (See ISO-209 for Parts) .....	9914.0210	1
55B	Vertical Rewind Assembly (See ISO-209 for Parts).....	9914.0223	1
55C	H-18 Crank Handle (10" Length) Complete (See ISO-214 for Parts).....	9914.0011	1
58A	Motor, 12 Volt Explosion-Proof .....	9915.0003	1
58B	Motor, 12 Volt Non-Explosion Proof.....	9915.0042	1
58C	Motor Mounting Plate (For Non Explosion Proof Motor).....	9923.0008	1
72A	11T35 Motor Sprocket, 1-5/16" Long.....	9910.1118	1
72B	112T35 Disc Sprocket (19-21 Discs) (Not Shown).....	9910.1321	1
72B	138T35 Disc Sprocket (23-24 and 25-26 Discs).....	9910.1423	1
72B	180T35 Disc Sprocket (30-31 Discs) (Not Shown).....	9910.1526	1
72C	H-26 Ring Gear (Up to 25-26) .....	9914.0372	1
72C	H-28 Ring Gear (26-27 and above) (Not Shown).....	9914.0382	1
73	Woodruff Key #9 (3/16" x 3/4") (For Motor and Comet Brake) (Not Shown) .....	9916.0080	2
87	Anodized Threaded Spacer Pipe.....	Spec Model	6



# 66 Series, TSF

High Flow Triplex Pump

## FEATURES

- Oversized roller bearings
- Fully anodized crankcase
- Innovative new seal design extends seal life
- New plunger design improves thermal shock resistance
- New valve cap improves hydrostatic performance



## SPECIFICATIONS

Pump Model	TSF1819	TSF2019	TSF2019 Alternate Spec	TSF2019DS Dual Shaft	TSF2021	TSF2021 Alternate Spec	TSF2219	TSF2219 Alternate Spec	TSF2221	TSF2221 Alternate Spec	TSF2819	TSF2421	TSF2421 Alternate Spec
Maximum Volume	6.3 GPM	7.6 GPM	6.3 GPM	7.6 GPM	8.5 GPM	7.0 GPM	9.3 GPM	7.7 GPM	10.2 GPM	8.5 GPM	12.1 GPM	12.0 GPM	10.0 GPM
Maximum Discharge Pressure	4350 PSI	4000 PSI	4350 PSI	4000 PSI	3600 PSI		3000 PSI			2200 PSI	2500 PSI	3000 PSI	
Horsepower	18.8 EBHP	20.8 EBHP	18.7 EBHP	20.8 EBHP	21 EBHP	17.3 BHP	19.1 BHP	15.8 BHP	21 BHP	17.5 BHP	18.2 EBHP	20.5 EBHP	17.1 EBHP
Maximum Pump Speed	1750 RPM		1450 RPM	1750 RPM	1750 RPM	1450 RPM	1750 RPM	1450 RPM	1750 RPM	1450 RPM		1750 RPM	1450 RPM
Maximum Inlet Pressure	125 PSI												
Maximum Inlet Vacuum	9 ft. water / 7.9 in. Hg												
Plunger Bore (in / mm)	.709 in. / 18 mm	.787 in. / 20 mm			.866 in. / 22 mm			1.102 / 28 mm		.945 / 24 mm			
Plunger Stroke (in / mm)	.748 in. / 19 mm				.826 in. / 21 mm		.748 / 19		.826 in / 21 mm		.748 / 19 mm		.826 in / 21 mm
Oil Capacity	37.2 oz.												
Maximum Fluid Temperature	165° F												
Inlet Port Thread	3/4"-14 BSP-F												
Discharge Port Thread	3/8"-19 BSP-F												
Shaft Diameter (in / mm)	.945 in. / 24 mm												
Weight	40.7 lbs / 18.5 kg												
Dimensions	14.94" x 9.78" x 6.99"												

TRIPLEX

TRIPLEX



General Pump is a member of the Interpump Group



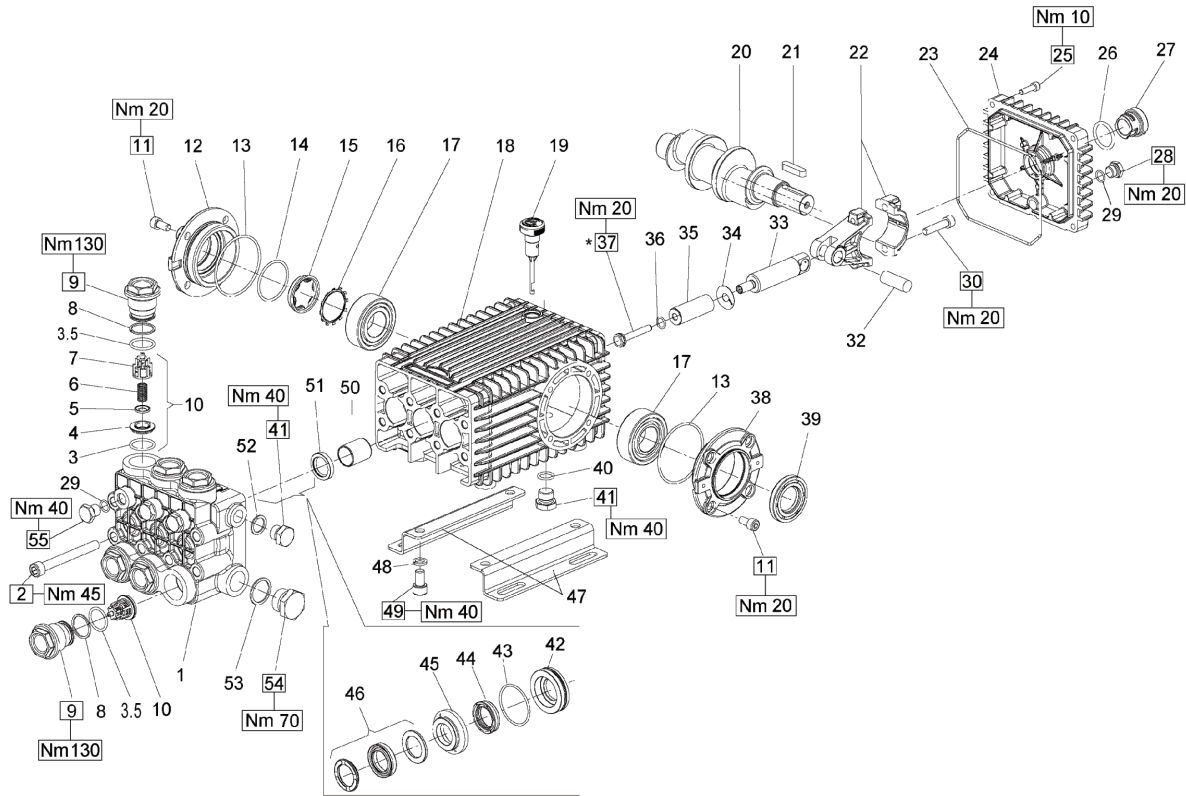
Ref 310045 Rev. N  
04-19



# 66 Series, TSF

## GENERAL PUMP

A member of the Interpump Group



### PARTS LIST

POS.	PART NO.	DESCRIPTION	QTY.	POS.	PART NO.	DESCRIPTION	QTY.	POS.	PART NO.	DESCRIPTION	QTY.
1	66124541	Manifold, Ø 18mm	1	21	91489200	Key, 9x7x35	1	42	66080470	Seal Retainer, Ø 24mm	3
	66120041	Manifold, Ø 20mm	1	22	66030001	Connecting Rod, Complete	3		66082570	Seal Retainer, Ø 28mm	3
	66120141	Manifold, Ø 22 mm	1	23	90392200	O-ring, Ø133.02x2.62	1	43	90361600	O-ring, Ø 34.65x1.78	3
	66120241	Manifold, Ø 24mm	1	24	66160022	Rear Cover	1	44	90265200	LP Seal, Ø 18mm	3
	66124641	Manifold, Ø 28mm	1	25	99188400	Screw, M6x20	4		90269000	LP Seal, Ø 20mm	3
2	99380100	Headbolt M10 x 90	8	26	90405100	O-ring, 26.58x3.53	1		90271500	LP Seal, Ø 22mm	3
3	90385700	O-ring, Ø 23.81x2.62	6	27	63210051	Oil Level Indicator	1		90273800	LP Seal, Ø 24mm	3
3.5	90385700	O-ring, Ø 23.81x2.62	6	28	98204100	Plug, G1/4"x9	1		90275300	LP Seal, Ø 28mm	3
4	36203366	Valve Seat	6	29	701013	O-ring, Ø 426x.070	4	45	66216370	Intermediate Ring, Ø 18mm	3
5	36203476	Valve Poppet	6	30	99309900	Screw, M8x35	6		66216070	Intermediate Ring, Ø 20mm	3
6	94738800	Valve Spring Ø10x18x18.5	6	32	97740500	Wrist Pin, 14x39	3		66216170	Intermediate Ring, Ø 22mm	3
7	36203551	Valve Guide	6	33	66050066	Piston Guide	3		66216470	Intermediate Ring, Ø 24mm	3
8	90516500	Anti-ext ring Ø24.7x29x1.5	6	34	96710100	Flinger Washer	3		66220070	Intermediate Ring, Ø 28mm	3
9	66130041	Plug, M32x1.5x29.5	6	35	66040309	Plunger, Ø 18mm	3	46	90265500	HP Seal, Ø 18mm	3
10	36712701	Valve Assy., Complete	6		66040009	Plunger, Ø 20mm	3		90269200	HP Seal, Ø 20mm	3
11	99303900	Screw M8 x 16	8		66040109	Plunger, Ø 22 mm	3		90271700	HP Seal, Ø 22mm	3
12	47151222	Cover	1		66040409	Plunger, Ø 24mm	3		90274100	HP Seal, Ø 24mm	3
13	701147	O-ring, Ø67.95x2.62	2		66041009	Plunger, Ø 28mm	3		90275400	HP Seal, Ø 28mm	3
14	90387700	O-ring, Ø 39.34x2.62	1	36	90358400	O-ring, Ø 10.82x1.78	3	47	47200074	Pump Rail	2
15	70211801	Oil Sight Glass	1	37	66219566	Plunger Bolt	3	48	96710600	Washer M10	4
16	90075600	Retainer Clip	1	38	47151022	Side Cover, PTO	1	49	99364400	Screw M10 x 18	4
17	91838000	Bearing	2	39	90164800	Seal, Shaft	1	50	90912600	Guide Bushing	3
18	66010022	Crankcase	1	40	90383300	O-ring, Ø 13.95x2.62	1	51	90162500	Seal, Plunger Rod	3
19	98210600	Dipstick, vented	1	41	98210000	Plug 3/8 x 13	2	52	96738000	Gasket, Aluminum 3/8"	1
20	66021035	Crankshaft, 19mm Stroke, 1 Dual Shaft	1	42	66080370	Seal Retainer, Ø 18mm	3	53	96770000	Washer	1
	66020035	Crankshaft, 19mm Stroke	1		66080070	Seal Retainer, Ø 20mm	3	54	98226800	Plug, G3/4"x16	1
	66020435	Crankshaft, 21mm Stroke	1		66080170	Seal Retainer, Ø 22mm	3	55	98204300	Plug 1/4" x 13	3

### REPAIR KITS

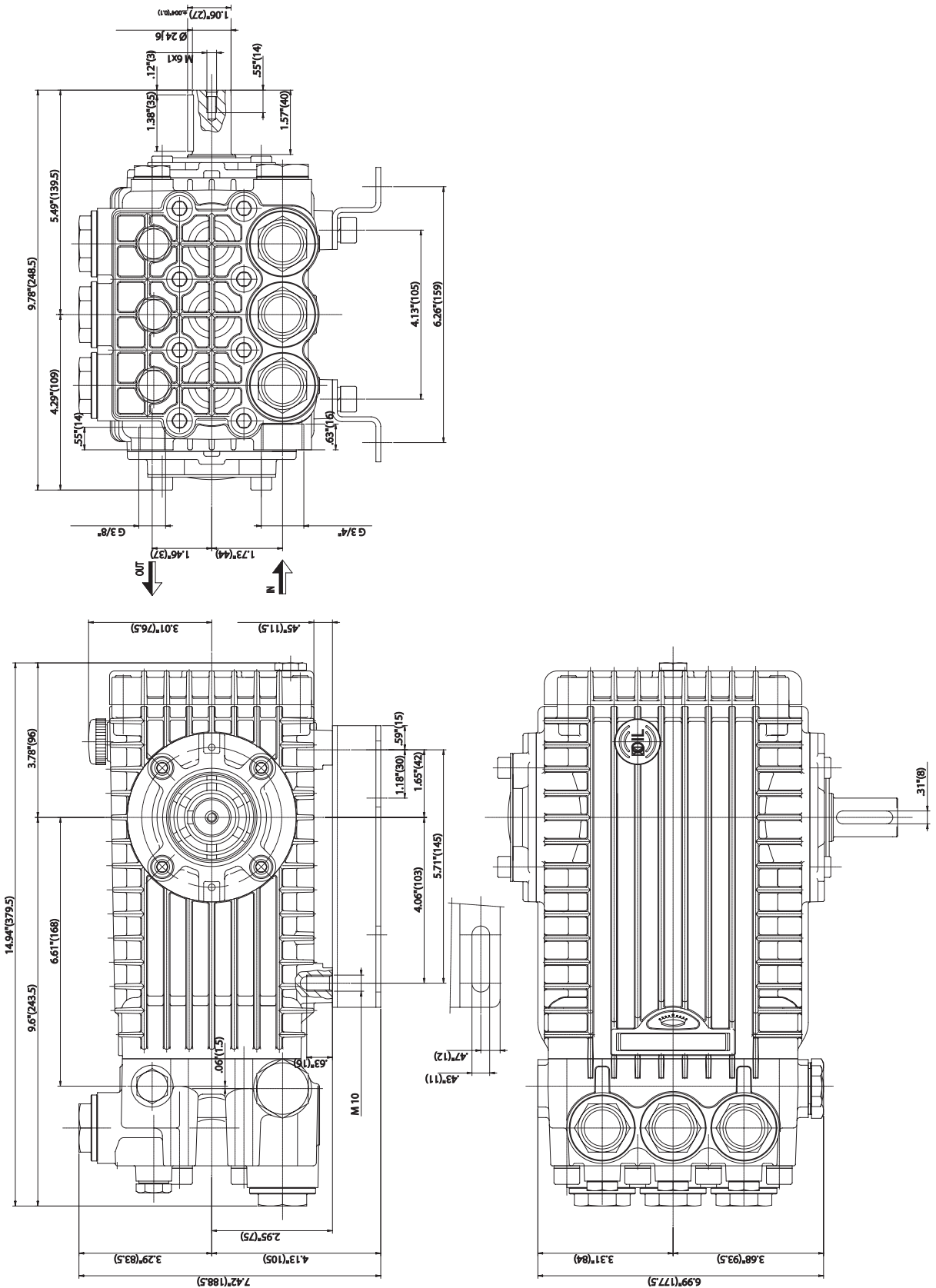
KIT NO.	K02	K03	K169	K180 (18mm)	K176 (18mm)	K170 (20mm)	K171 (20mm)	K172 (22mm)	K173 (22mm)	K181 (24 mm)	K182 (24mm)	K248 (28mm)	K247 (28mm)
POS. NO's INCLUDED IN KIT	51	39	3, 4, 5, 6, 7 (10)	44, 46	42, 43, 44, 45, 46	44, 46	42, 43, 44, 45, 46	44, 46	42, 43, 44, 45, 46	44, 46	42, 43, 44, 45, 46	44, 46	42, 43, 44, 45, 46
NUMBER OF ASSEMBLIES IN KIT	3	1	6	3	1	3	1	3	1	3	1	3	1
NUMBER OF CYLINDERS KIT WILL SERVICE	3	N/A	3	3	1	3	1	3	1	3	1	3	1

# 66 Series, TSF

**GENERAL PUMP**

A member of the Interpump Group

## DIMENSIONAL DRAWING



**TORQUE SPECS\***

POS.	Nm	Ft/lb
2	45	33.2
9	130	95.9
11	20	14.8
25	10	7.4
28	20	14.8
30	20	14.8
37**	20	14.8†
41	40	29.5
49	40	29.5
54	70	51.6
55	40	29.5

\* Decrease torque by 20% if threads are lubricated

\*\* Use Loc-Tite 542 or similar

**OIL CHANGING**

1. Oil changing must be done with the pump at operating temperature.
- 1.2 Put a container under the oil drain plug (3).
- 1.3 Remove the oil dipstick (1) and then the drain plug (3).
- 1.4 Wait until all the oil has drained out, then screw the drain plug (3) and tighten at the torque shown in the exploded diagram and above table.
- 1.5 Fill with new oil (General Pump Series 100) until the middle of the oil sight glass is reached, screw by hand the oil dipstick (1).

