

# OIL CLEANING CENTRIFUGE

## Model 150



### FEATURES

- True Centrifuge
- Reduces Hazardous Waste
- Reduces Engine Wear
- Extends Oil and Filter Life
- Removes Solids Below One Micron
- Diagnostic Tool
- User Friendly
- Easy Installation
- Rugged Construction



Made in U.S.A.

INSTALLATION • SERVICE • PARTS

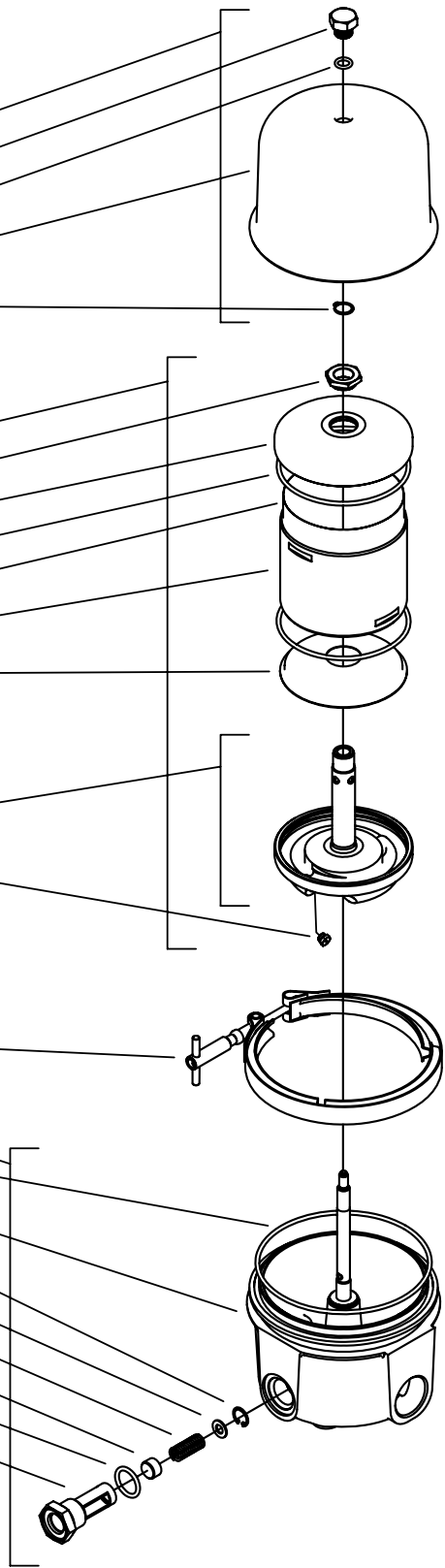
# Parts List

## Model 150

Centrifuge ----- Model 150

### Parts List

Description	Part No.
<b>Cover Assembly</b> (no clamp) -----	<b>C150-CA</b>
Cover Nut -----	C75-13
Seal-Cover Nut -----	C75-12
Cover -----	C150-14
Snap Ring, Cover Nut -----	C75-18
<b>Centrifuge Turbine Assembly</b> -----	<b>C150-TA</b>
Nut-Turbine -----	C75-11
Cover-Turbine -----	C150-03
Seal-Turbine (2 req'd) -----	C150-10
Insert-Turbine (Package of 25) -----	C150-24P
Bowl-Turbine -----	C150-02
Baffle-Turbine -----	C150-04
<b>Base, Turbine Assembly</b> (sold as assembly only) -----	<b>C150-BTA</b>
Nozzle-Turbine (2 req'd) -----	C150-19
Cover Clamp -----	C150-25
<b>Base Assembly</b> (no clamp) -----	<b>C150-BA</b>
Seal, Base to Cover -----	C150-15
Base/Shaft (sold as assembly only) -----	C150-16-A
Cut-out Valve Snap Ring -----	1690
Cut-out Valve Retainer -----	C150-22
Cut-out Valve Spring -----	C150-23
Cut-out Valve Plug -----	C150-21
Seal, Cut-out Valve -----	C1000-29
Cut-out Valve Body -----	C150-20
Fitting, Inlet, 3/4-16 UNF x 1/2" FNPT -----	C150-26



# Installation and Operation

## Oil Supply to Centrifuge

Oil supply should be taken from a source as close to the lube oil pump discharge as possible and on the dirty side of the full flow oil filter. A 1/4" NPT pipe or #6 hose supply should be used for supply with a full-opening ball valve installed in supply line to allow the centrifuge to be isolated for cleaning without shutting the engine down. The centrifuge will operate efficiently at 30 to 90 psig with the preferred pressure of 60 to 80 psig.

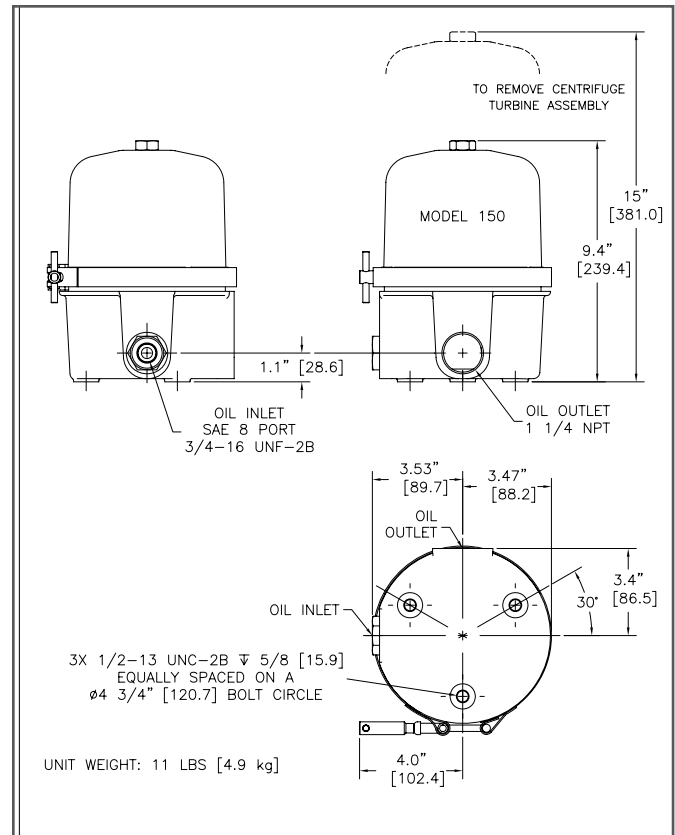
## Clean Oil Return to Sump

The clean oil drain line to the sump should be a 1.0" minimum diameter unrestricted hose or pipe to a 1.0" connection located above the oil level is required. Alternate oil fill openings or drilled-and-tapped holes in crankcase doors are options that can be used. **The oil drain line should be free of any shut-off valves.**

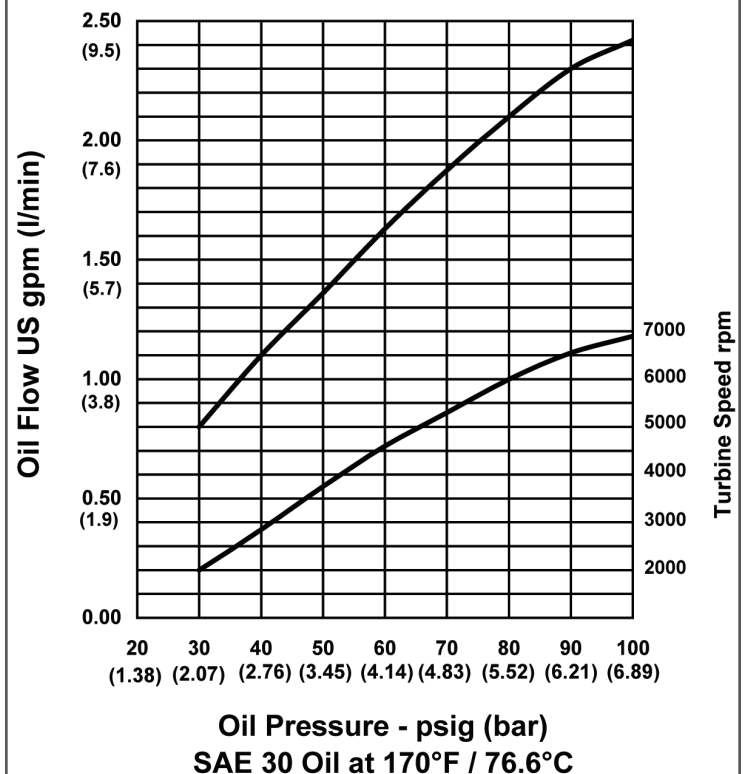
The drain is correct if you can drop in a 1 1/4" diameter ball and it can freely roll through the drain line into the engine.

## Mounting Considerations

SPINCLEAN™ Centrifuges are high-speed devices and should be securely mounted to prevent excessive vibration.



## MODEL 150



# Service Instructions

1. Shut off oil supply or stop the engine and allow centrifuge turbine assembly to come to a complete stop. **The oil drain line should be free of any shut-off valves.**
2. Unscrew cover and remove cover assembly.
3. Lift the turbine assembly one inch and allow the oil to completely drain out of the nozzles before removing completely.
4. Remove turbine nut, **Part # C150-11**. Carefully separate the turbine assembly. **DO NOT strike the bushings with or against a hard surface or damage will result.**
5. Remove lower turbine bowl seal, **Part # C150-10**, and baffle, **Part # C150-04**.
6. Carefully remove the solids cake from the turbine bowl, **Part # C150-02**, taking care not to damage the turbine bowl. Thoroughly wash away all traces of the solids cake to insure maintaining turbine assembly balance.
7. Thoroughly clean all other turbine parts. Check turbine nozzles, **Part # C150-19**, and make sure they are unrestricted. Replace turbine bowl seals, **Part # C150-10**. Examine top and bottom bearings for excessive wear. Replace turbine base assembly, **Part # C150-BTA**, if diameters exceed 0.317" (8.1 mm) top or 0.396" (10.1 mm) bottom.
8. Seat baffle in turbine base and install lower turbine bowl seal, **Part # C150-10**. Install turbine insert, **Part # C150-24**, inside turbine bowl. Reassemble the turbine assembly tightening the turbine nut, **Part # C150-11** securely to a torque value of 10-15 in-lbs.
9. Examine stationary shaft journals for damage or excessive wear. Replace base assembly, **Part # C150-BA**, complete with stationary shaft if diameter is less than 0.312" (7.9 mm) top or 0.391" (9.9 mm) bottom. The stationary shaft is permanently installed and cannot be replaced.
10. Coat the stationary shaft with clean oil. Install the turbine assembly on the stationary shaft, being careful not to damage bearings. Spin turbine assembly on the stationary shaft and make sure it spins freely and unrestricted.
11. Clean and inspect cover assembly, **Part # C150-CA**, and make sure the cover nut seal, **Part # C150-12**, is not leaking. If necessary, replace the seal by removing the cover nut snap ring, **Part # C150-18**, and remove the cover nut with seal from the cover.
12. Replace the base to cover seal, **Part # C150-15**.
13. Replace the cover assembly and tighten the cover nut by hand pressure plus another half turn. Make sure the cover seats evenly around the base to insure proper crush on cover to base seal to prevent oil leaks.
14. Remove cut-out valve body, **Part # C150-20**, from cast base, **Part # C150-16**. Replace cut-out valve seal, **Part # C1000-29**. Inspect assembly to make sure cut-out valve plug, **Part # C150-21**, is seated against the cut-out valve body. Replace cut-out valve assembly into base securely to a torque value of 10-15 in-lbs.

*SpinClean™ Representative:*



150-12207

## FLUID POWER ENERGY, INC.

W229 N591 Foster Court • Waukesha, WI 53186

Phone: 262.548.6220 • FAX: 262.548.6239

Website: [www.fpevalves.com](http://www.fpevalves.com)

