



# FILTER REPLACEMENT INSTRUCTIONS FOR PURADYN M25, M45, M85, MTS 40, MTS 60, MTS 240 OR OLDER TF AND MODIFIED TF 40, TF 60, TF 240

## IDENTIFY WHICH SYSTEM YOU ARE USING BEFORE STARTING

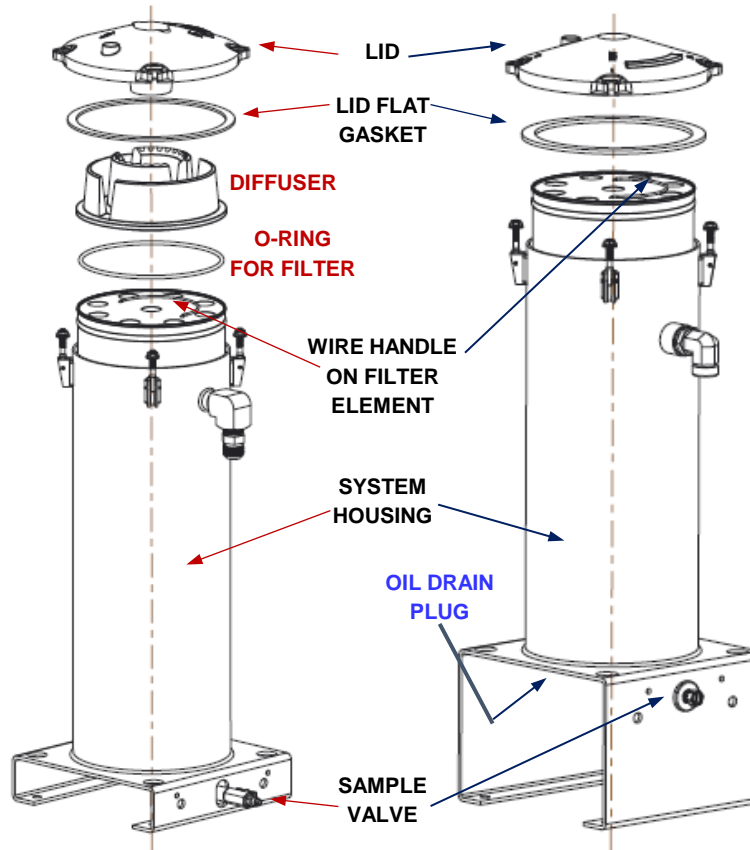
### TF (includes diffuser)

### M or MTS SERIES

Modified TF systems have had their original electrical components removed but still have a diffuser. TF replacement filters (ending in "TF") include a replacement gasket and O-ring.

M-series (previously MTS) units entered the market in 2015 and do not contain a diffuser. The M85 or MTS240 can be identified by a higher 7.5" base vs. a 2.5" base of a TF unit.

1. Before changing the filter, take an oil sample using instructions found at bottom of next page.
2. Either shut off engine or close shut-off valve to stop oil flow to the Puradyn unit. Wait a few minutes to allow oil to drain from unit before changing the filter element.
3. Loosen the four nuts on lid retaining studs enough to allow the studs to swing clear of head.  
**⚠ The lid and diffuser may be HOT.**
4. Remove the lid from unit canister. Remove flat gasket from lid and discard.
5. Remove diffuser and O-ring. Discard O-ring.
6. **⚠ Filter element may be HOT and top cut-outs may have sharp edges.** Using the wire handle, firmly twist filter less than a one-quarter turn to disconnect and pull up to remove. Remove new filter element from plastic bag, and place old filter into bag to help prevent oil spills. Close bag with supplied tie wrap and dispose.
7. Insert the new filter element in the unit, making sure the rubber grommet at the bottom fits securely over the nipple at the bottom of the unit canister.
8. Install new O-ring (provided) on top of the new filter.
9. Place diffuser on top of the new filter & the O-ring, making sure to align the slot in the diffuser with the return fitting of the unit.
10. Install new flat gasket (provided) and place the lid on unit, making sure the flat gasket on the underside of the lid is securely in place.
11. Swing the four studs into position to tighten.
12. Following the 1-2-3-4 numbering pattern on top of lid, tighten the nuts securely (5-8 ft-lbs torque). For more information or if torque wrench is not available, **see next page.**
13. **Add replacement oil:** 3 gallons for 240 model, 1.5 gallons for 60 model and 1 gallon for 40 model.
14. Check oil level after 30 minutes running time to determine if more makeup oil is needed.



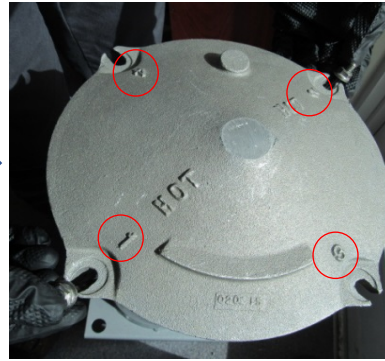
Vertical clearance requirement:  
 20" for Size M85 or 240 models shown above.  
 12" for Size M45 or 60 models.  
 8" for Size M25 or 40 models.

1. Before changing the filter, take an oil sample using instructions found at bottom of next page.
2. Either shut off engine or close shut-off valve to stop oil flow to the Puradyn unit. Wait a few minutes to allow oil to drain from unit before changing the filter element.
3. Loosen the four nuts on lid retaining studs enough to allow the studs to swing clear of head.  
**⚠ The lid may be HOT.**
4. Remove the lid from unit canister and set it down gasket side up. Check flat gasket inside lid for excessive wear or splitting. Replacement flat gaskets may be purchased separately.
5. To reduce spillage, you may use the Oil Drain Plug found under the system housing to drain all standing oil before removing the filter.
6. **⚠ Filter element may be HOT and top cut-outs may have sharp edges.** Using the wire handle, firmly twist filter less than a one-quarter turn to disconnect and pull up to remove. Remove new filter element from plastic bag, and place old filter into bag to help prevent oil spills. Close bag with supplied tie wrap and dispose.
7. Insert the new filter element in the unit, making sure the rubber grommet at the bottom fits securely over the nipple at the bottom of the unit canister.
8. Place the lid on unit and swing the four studs into position to tighten.
9. Following the 1-2-3-4 numbering pattern on top of lid, tighten the nuts securely (5-8 ft-lbs torque). For more information or if torque wrench is not available, **see next page.**
10. **Add replacement oil:** 3 gal. for M85/MTS 240, 1.5 gal for M45/MTS 60 and 1 gal for M25/ MTS 40. If oil was drained using drain plug at the base of M85/MTS240 model, add additional 2 quarts of oil.
11. Check oil level after 30 minutes running time to determine if more makeup oil is needed.

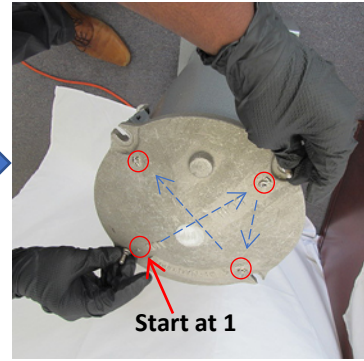
# Procedures For Correct Closing and Sealing Of System After Filter Replacement



1. Line up torque bolts with slots on lid, and place lid centered on top of canister rim to get a proper seal.



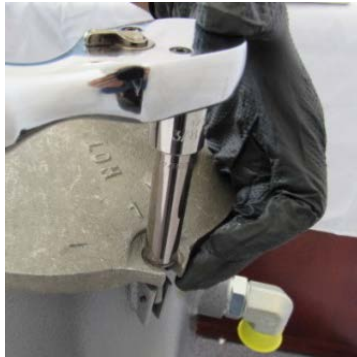
2. Flip bolts to the upright position, look for numbers **1, 2, 3, 4** on top of lid



3. Following the 1-2-3-4 numbering pattern on top of lid, tighten the nuts securely with a torque wrench set to 5-8 ft-lbs torque.



**If torque wrench is not available, hand-tighten each bolt and go to Steps 4-6 (below)**



4. Starting with corresponding number **1**, tighten lid bolt with **12** no. of ¼ (90-degree) wrench turns



5. On corresponding number **2**, tighten lid bolt with **8** no. of ¼ (90-degree) wrench turns (*do not exceed 8 no. of ¼ wrench turns*)



6. On corresponding numbers **3 and 4**, tighten lid bolt with **6-7** no. of ¼ (90-degree) wrench turns (*do not exceed 8 no. of ¼ wrench turns*)



Completely Closed Puradyn System

## INSTRUCTIONS FOR TAKING AN OIL SAMPLE

1. Engine must be running at normal operating temperature for sample to be taken accurately.
2. Open sample valve and flush about 1-2 ounces of oil to remove debris from valve.
3. Take sample of oil (2-3 ounces) using supplied bottle
4. Close sample valve and tighten securely.
5. Secure the lid on oil sample bottle and place inside the oil sample container.
6. Fill in all information requested on the oil sample form and mail the pre-labeled & pre-paid container to the lab.