



On Board Air Compressor

Off Road Only

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The ORO air compressor included with this kit is shipped **WITHOUT OIL** in the crankcase!

Failure to install the oil before operation will cause a compressor failure that will not be warrantied.

The supplied bottle will contain 10oz of oil. All of this should go into the compressor.

The oil is filled thru the ½” Head bolt/plug on either side of the body.

DO NOT tip compressor over once oil is installed. Leave compressor head (finned area) up or if it needs to be mounted on its side, rotate from the standing up position to the 90 degree position, making sure that the small “S” marking on the suction port near the hex head plug remains at the high side. Rotating the compressor to the opposite side will likely result in oil moving from the crankcase to the cylinder head area. This will result in low operating oil level in the crankcase as well as large amounts of oil output in the air line. IF Your compressor needs to be rotated the opposite direction, contact ORO for further instructions. NOTE: Not all heads have the “S” port

ORO Brackets for JK kits will utilize brass fittings to adapt from the 3/8” outlet to the -8 braided hose/swivel connections.

ORO TJ 2000-06 kits will utilize a machined head and elbow fittings to point the inlet/outlets to the rear of the vehicle for hood clearance. If you have a compressor and need the head to be modified, contact ORO.

The sight glass on the back of the compressor is valid only for vertical standing applications. Oil in the middle of this glass will signify the level is correct.

There is a syringe included, with a short chunk of rubber hose and some ¼” nylon air line. Utilizing the ¼” air line, you can use the syringe to draw the oil from the bottle and inject into the compressor.

You may also use the syringe once the compressor is installed to draw the oil out of it and refill for service.

We recommend this to be done every 3000 miles, depending on usage (Air suspension equipped models) for airing tire only models, check oil level before use and change once a year depending on use.

While looking at the clutch face, the OUTLET is on the RIGHT side, INLET on the left



Port Identification for the standard outlet .





Inspection

OIL CHARGE

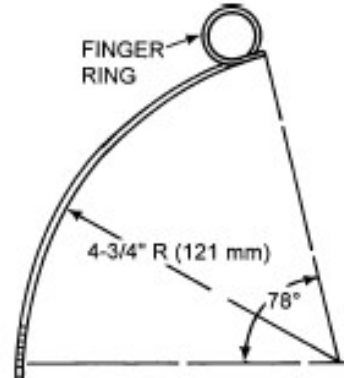
If the quantity of oil is unknown, the compressor oil level must be checked at the time of installation and again after the system has been fully charged with refrigerant and the system has been operated and balanced out to the desired compartment interior temperature.

Make the initial oil level check after the compressor is mounted on the mounting bracket and before initial refrigerant charge.

Remove one oil fill plug with its "O" ring, either plug on a vertical mount installation, the upper plug on horizontal mount installations.

LEFT HAND MOUNTING:
CHECK OIL WHEN NON ROK SHAFT KEY IS DOWN.

RIGHT HAND MOUNTING:
CHECK OIL WHEN NON ROK SHAFT KEY IS UP.



The Table below shows oil capacity in ounces (and ml) at various dipstick levels for both horizontal and vertical mount installations. The system is stabilized and the oil level is checked. The oil capacity is 10 ounces (177 ml) minimum to 16 ounces (355 ml) for best results.

OIL CHARGE vs. DIP STICK

HEAVY DUTY

Dipstick Reading	Oil Capacity (oz. / ml)
6 fl. oz. (177 ml)	1-1 (21)
8 fl. oz. (237 ml)	1-1 (25)
10 fl. oz. (296 ml)	1-1 (30)
12 fl. oz. (355 ml)	1-1 (41)
14 fl. oz. (414 ml)	1-1 (46)
16 fl. oz. (473 ml)	1-1 (49)

SUPER COM

Above is a copy of the York manual showing dipstick and measurements for oil capacity.

Critical info is this. In the vertical mount (as the ORO brackets usually mount it) the 10 ounce capacity is what we desire, so 1 1.8" of oil on the stick when measured thru the side hole in the compressor.

The oil supplied in the bottle is 10 ounces, the make up of that oil is a combination of Mobile 1 0-20W (8 ounces, or 4 syringe shots at 2 ounces each) and STP engine oil treatment, Blue bottle (2 ounces, 1 syringe shot) .

When the compressor is mounted vertically, and filled adequately, the oil level should be in the middle of the sight glass on the back side of the unit. Unfortunately, that sight glass is not visible in all of our bracket applications.

Although this compressor is modified to pump air, not oil, there may be a bit of oil that is trapped in the cylinders and rings or valves in the head, and this oil may become airborne in the first hours of use. If this oil is noticed during the first few hours of use, disconnect and clean the braided hose (Lead hose off the compressor) and other items necessary to determine if the oil usage continues or subsides. Contact ORO if this oil consumption does not subside.