



Instruction Manual Guide D'utilisation Manual de instrucciones

# D55166

Heavy-Duty Wheeled Portable Compressor Compresseur portatif à roues résistant Compresor Portátil con Ruedas de Servicio Pesado

# www.DeWALT.com

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1-800-4-DEWALT

## **Definitions: Safety Guidelines**

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

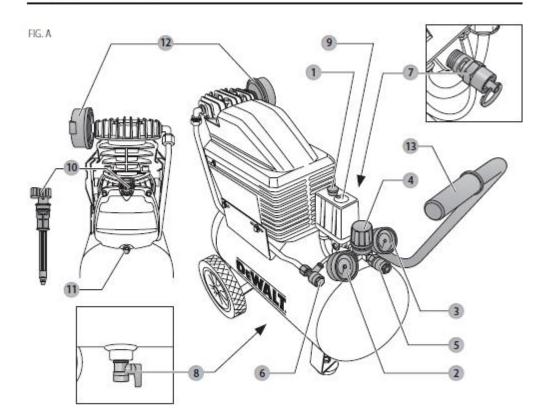


WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTICE:** Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.On/Off Switch



- On/Off Switch
- 2 Air Tank Pressure Gauge
- Regulated Pressure Gauge
- Pressure Regulator
- 5 Quick Connect
- 6 Check Valve
- 7 Safety Valve
- 8 Air Tank Drain Valve
- Pressure Switch
- 10 Pump Oil Dipstick
- 11 Pump Oil Drain Plug
- 12 Air Intake Filter
- 13 Handle



## WARNING! Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.



WARNING: To reduce the risk of injury, read the instruction manual.



WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.



WARNING: Some dust contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm such as asbestos and lead in lead based paint.

## **SAVE ALL WARNINGS AND** INSTRUCTIONS FOR FUTURE REFERENCE

#### HAZARD



#### DANGER: RISK OF EXPLOSION OR FIRE



What Can Happen	How to Prevent It			
It is normal for electrical contacts within the motor and pressure switch to spark.	Always operate the compressor in a well ventilated area free of combustible materials, gasoline, or solvent vapors.			
If electrical sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion.	If spraying flammable materials, locate compressor at least 20' (6.1 m) away from spray area. An additional length of air hose may be required.			
	Store flammable materials in a secure location away from compressor.			
Restricting any of the compressor ventilation openings will cause	Never place objects against or on top of compressor.			
serious overheating and could cause fire.	Operate compressor in an open area at least 12" (30.5 cm) away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings.			
·	Operate compressor in a clean, dry well ventilated area. Do not operate unit in any confined area. Store indoors.			
Unattended operation of this product could result in personal injury or property damage. To	Always remain in attendance with the product when it is operating.			
reduce the risk of fire, do not allow the compressor to operate unattended.	Always turn off and unplug unit when not in use.			

## **HAZARD**

What Can Happen How to Prevent It



A DANGER: RISK TO BREATHING (Asphyxiation)



## The compressed air directly from your compressor is not safe for breathing. The air stream may contain carbon monoxide, toxic vapors, or solid particles from the air tank. Breathing these contaminants can cause serious Injury or death.

Never use air obtained directly from the compressor to supply air for human consumption. The compressor is not equipped with suitable filters and in-line safety equipment for human consumption.

#### What Can Happen How to Prevent It Exposure to chemicals in dust Work in an area with good cross created by power sanding, ventilation. Read and follow the sawing, grinding, drilling, and safety instructions provided on the other construction activities may label or safety data sheets for the he harmful materials you are spraying. Always use certified safety equipment: Sprayed materials such as paint, NIOSH/MSHA respiratory protection paint solvents, paint remover, or properly fitting face mask Insecticides, weed killers, may designed for use with your specific contain harmful vapors and application.

#### **HAZARD**



poisons.

## WARNING: RISK OF BURSTING



Air Tank: On February 26, 2002, the U.S. Consumer Product Safety Commission published Release # 02–108 concerning air compressor tank safety:

Air compressor receiver tanks do not have an infinite life. Tank life is dependent upon several factors, some of which include operating conditions, ambient conditions, proper installations, field modifications, and the level of maintenance. The exact effect of these factors on air receiver life is difficult to predict.

If proper maintenance procedures are not followed, internal corrosion to the inner wall of the air receiver tank can cause the air tank to unexpectedly rupture allowing pressurized air to suddenly and forcefully escape, posing risk of injury

Your compressor air tank must be removed from service by the end of the year shown on your tank warning label. The following conditions could lead to a weakening of the air tank, and result in a violent air tank explosion:

What Can Happen	How to Prevent It	
Failure to properly drain condensed water from air tank, causing rust and thinning of the steel air tank.	Drain air tank daily or after each use. If air tank develops a leak, replace it immediately with a new air tank or replace the entire compressor.	
Modifications or attempted repairs to the air tank.	Never drill into, weld, or make any modifications to the air tank or its attachments. Never attempt to repair a damaged or leaking air tank. Replace with a new air tank.	
Unauthorized modifications to the safety valve or any other components which control air tank pressure.	The air tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.	

## What Can Happen How to Prevent It Attachments & Accessories:

Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires, and other Inflatables can cause them to explode or fly apart, and could result in serious injury.

Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use compressor to inflate small low pressure objects such as children's toys, footballs, basketballs, etc.

#### Tires:

Over inflation of tires could result in serious injury and property damage.

the tires pressure before each use and while inflating tires; see the tire sidewall for the correct tire pressure. NOTE: Air tanks, compressors and similar equipment used to inflate tires can fill small tires very rapidly. Adjust pressure regulator on air supply to no more than the rating of the tire pressure. Add air in small Increments and frequently use the tire gauge to prevent over inflation.

Use a tire pressure gauge to check

## HAZARD



## ♠ WARNING: RISK OF ELECTRICAL SHOCK

What Can Happen	How to Prevent It		
Your compressor is powered by electricity. Like any other electrically powered device, if it is not used properly it may cause electric shock	Never operate the compressor outdoors when it is raining or in wet conditions.		
CICLIFE SHARE	Never operate compressor with protective covers removed or damaged.		
Repairs attempted by unqualified personnel can result in serious injury or death by electrocution.	Any electrical wiring or repairs required on this product should be performed by authorized service center personnel in accordance with national and local electrical codes.		
Electrical Grounding: Failure to provide adequate grounding to this product could result in serious injury or death from electrocution. Refer to Grounding Instructions paragraph in the Installation section.	Make certain that the electrical circuit to which the compressor is connected provides proper electrical grounding, correct voltage and adequate fuse protection.		

#### **HAZARD**



#### WARNING: RISK FROM FLYING OBJECTS



The compressed air stream can cause soft tissue damage to exposed skin and can propel dirt, chips, loose particles, and small objects at high speed, resulting In property damage or personal injury.

## What Can Happen | How to Prevent It

Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) with side shields when using the compressor.

Never point any nozzle or sprayer toward any part of the body or at other people or animals.

Always turn the compressor off and bleed pressure from the air hose and air tank before attempting maintenance, attaching tools or accessories.

#### **HAZARD**



WARNING: RISK OF HOT SURFACES



## What Can Happen How to Prevent It

Touching exposed metal such as the compressor head, engine head, engine exhaust or outlet tubes, can result in serious burns. Never touch any exposed metal parts on compressor during or Immediately after operation. Compressor will remain hot for several minutes after operation. Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.

## **HAZARD**



#### WARNING: RISK FROM MOVING PARTS



What Can Happen		How to Prevent It		
	Moving parts such as the pulley,	Never operate the compressor		
	flywheel, and belt can cause	with guards or covers which are		
		damaged or removed.		
	contact with you or your clothing.	Keep your hair, clothing, and glov		
		away from moving parts. Loose		

Keep your hair, clothing, and gloves away from moving parts. Loose clothes, Jewelry, or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided as well.

Attempting to operate compressor with damaged or missing parts or attempting to repair compressor with protective shrouds removed can expose you to moving parts and can result in serious injury.

Any repairs required on this product should be performed by authorized service center personnel.

#### **HAZARD**



#### WARNING: RISK OF UNSAFE OPERATION



What Can Happen	How to Prevent It		
Unsafe operation of your compressor could lead to serious Injury or death to you or others.	Review and understand all instructions and warnings in this manual.		
	Become familiar with the operation and controls of the air compressor.		
	Keep operating area clear of all persons, pets, and obstacles.		
	Keep children away from the air compressor at all times.		
	Do not execute the product when		

Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.

Never defeat the safety features of this product.

Equip area of operation with a fire extinguisher.

Do not operate machine with missing, broken, or unauthorized

Never stand on the compressor.

#### HAZARD



WARNING: RISK OF FALLING



What Can Happen	How to Prevent It
A portable compressor can fall	Always operate compressor in a
from a table, workbench, or roof	stable secure position to prevent
causing damage to the compressor	accidental movement of the unit.
and could result in serious injury or	Never operate compressor on a
death to the operator.	roof or other elevated position. Use
	additional air hose to reach high
	locations.

#### **HAZARD**



WARNING: RISK FROM NOISE



What Can Happen	How to Prevent It
Under some conditions and	Always wear proper hearing
duration of use, noise from this	protection during use.
product may contribute to hearing	
OSS.	

#### **HAZARD**



CAUTION: RISK OF INJURY OR PROPERTY DAMAGE WHEN TRANSPORTING OR STORING



What Can Happen	How to Prevent It		
Oil can leak or spill and could result in fire or breathing hazard, resulting in serious injury or death. Oil leaks can damage carpet, paint or other surfaces in vehicles or trailers.	Place compressor on protective mat when transporting to protect against damage from leaks. Remove compressor from vehicle upon arrival at destination. Always keep compressor level and never lie on its side.		
The compressor (wheeled dolly style unit). Is too heavy to be lifted by one person.	Use two people to lift the compressor. Lift only from recommended lift points.		
Unsecured compressor can move when being transported in a vehicle or trailer, causing personal injury or property damage.	Place compressor on flat horizontal surface when transporting and secure compressor using recommended tie-down points so that it cannot move while being transported.		

## SAVE THESE INSTRUCTIONS FOR **FUTURE USE**



WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemicallytreated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.



WARNING: Use of this tool can generate and/ or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

## COMPONENTS AND FEATURES (FIG. A-E)

 $\Lambda$ 

**WARNING:** Never modify the power tool or any part of it. Damage or personal injury could result.

Refer to Figure A at the beginning of this manual for a complete list of components.

#### Specifications

MODEL	D55166
WEIGHT	59.5 lbs. (27 kg)
HEIGHT	23.23" (590 mm)
WIDTH	10.04" (255 mm)
LENGTH	22.44" (569.9 mm)
AIR TANK CAPACITY (GALLONS)	6 Gallon (22.7 liters)
APPROX CUT-IN PRESSURE	105 PSI (723.9 kPa)
APPROX CUT-OUT PRESSURE	135 PSI (930.7 kPa)
SCFM @ 90 PSI (620.5 kPa)	3.8
VOLTAGE	Single 120 V
MINUMUM BRANCH CIRCUIT REQUIREMENT	15 Amp
PUMP OIL CAPACITY	10.6 oz. (313.5 ml)
FUSE TYPE	TIME DELAY
REGULATED PRESSURE RATING (APPROXIMATE)	7-135 PSI
. ,	
QUICK CONNECT (E) TYPE	1/4" (6.4 mm) INDUSTRIAL
DUTY CYCLE	5 min ON, 5 min OFF

## READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the

illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

#### On/Off Switch

Place this switch (1) in the ON position to provide automatic power to the pressure switch and OFF to remove power at the end of each use.

#### Pressure Switch

The pressure switch (9) automatically starts the motor when the air tank pressure drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

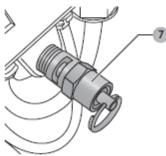
## Pressure Release Valve

The pressure release valve located on the side of the pressure switch, is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches cut-out pressure or is shut off. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running or after the unit reaches cut-out pressure.

#### Safety Valve

If the pressure switch does not shut off the air compressor at its "cut-out" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the pressure switch "cut-out" setting).





#### Check Valve

When the air compressor is operating, the check valve (6) is "open", allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes", allowing air pressure to remain inside the air tank.

#### Tank Pressure Gauge

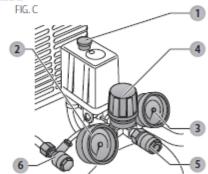
The tank pressure gauge (2) indicates the reserve air pressure in the tank.

#### **Regulated Pressure Gauge**

The regulated pressure gauge (3) indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator.

## Regulator

The regulator (4) controls the air pressure shown on the outlet pressure gauge. Turn regulator knob clockwise to increase pressure and counterclockwise to decrease pressure.



#### **Drain Valve**

The drain valve (8) is located at the base of the air tank and is used to drain condensation at the end of each use. See **Draining Air Tank** under **Maintenance**.

FIG. D



#### Cooling System

This compressor contains an advanced design cooling system. At the heart of this cooling system is an engineered fan. It is perfectly normal for this fan to blow air through the vent holes in large amounts. You know that the cooling system is working when air is being expelled.

#### Air Compressor Pump

The pump compresses air into the air tank. Working air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

#### Motor Overload Protector

The motor has a thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. To restart:

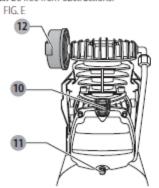
- 1. Set the On/Off switch (1) to OFF and unplug unit.
- 2. Allow the motor to cool.
- Plug the power cord into the correct branch circuit receptacle.
- 4. Set the On/Off switch to ON position.

#### Oil Dipstick

The oil dipstick (10) indicates the amount of oil in the pump. Check pump oil daily, see Compressor Pump Oil under Maintenance

#### Air Intake Filter

The filter (12) is designed to clean air entering the pump. To ensure the pump continually receives a clean, cool, and dry air supply the filter must always be clean and the filter intake must be free from obstructions.



#### ASSEMBLY

You must assemble the compressor before using it for the first time.

# Fitting the Wheels and Bumpers (Fig. F, G)

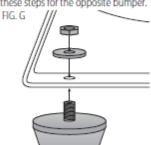
#### Fit the supplied wheels:

- Insert the bolt through the wheel and bracket as shown in Fig. F.
- Holding the locking nut in place with a wrench, tighten the wheel bolt securely.
- 3. Repeat these steps for the opposite wheel.



#### Attach the bumpers:

- Align the bumper threads with washer and nut as shown in Fig. G.
- Insert threaded shaft through the bracket hole tighten bolt securely.
- 3. Repeat these steps for the opposite bumper.



## Installing Hoses (Fig. C)



**WARNING:** Risk of unsafe operation. Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.

- 1. Ensure Regulated Pressure Gauge (3) reads 0 psi.
- Grasp the hose at the Quick Connect (5) plug and push the plug into the Quick Connect (5) body. Coupler will snap into place.
- 3. Grasp the hose and pull to ensure coupler is seated.

## Disconnecting Hoses (Fig. C)



**WARNING:** Risk of unsafe operation. Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.

1. Ensure Regulated Pressure Gauge (3) reads 0 psi.

Pull coupler on Quick Connect (5) body back to release Quick Connect (5) plug on hose.

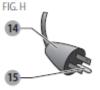
## Grounding Instructions (Fig. H)

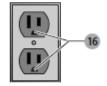


WARNING: Risk of Electrical Shock. In the event of a short circuit, grounding reduces the risk of shock by providing an escape wire for the electric current. This air compressor must be properly grounded.

The portable air compressor is equipped with a cord having a grounding wire with an appropriate grounding plug (14).

 The cord set and plug (14) with this unit contains a grounding pin (15). This plug MUST be used with a grounded outlet (16).





IMPORTANT: The outlet being used must be installed and grounded in accordance with all local codes and ordinances

- Ensure the outlet being used has the same configuration as the grounded plug. DO NOT USE AN ADAPTER
- Inspect the plug and cord before each use. Do not use if there are signs of damage.
- If these grounding instructions are not completely understood, or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.



WARNING: Risk of Electrical Shock. IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.

- Do not modify the plug provided. If it does not fit the available outlet, a correct outlet should be installed by a qualified electrician.
- Repairs to the cord set or plug MUST be made by a qualified electrician.

## **Extension Cords**

If an extension cord must be used, be sure it is:

 a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product in good condition no longer than 50' (15.2 m) 12 gauge (AWG) or larger. [Wire size increases as gauge number decreases. 10 AWG may also be used. DO NOT USE 14, 16 OR 18 AWG.)]

> NOTICE: Risk of Property Damage. The use of an undersized extension cord will cause voltage to drop resulting in power loss to the motor and overheating. Instead of using an extension cord, increase the working reach of the air hose by attaching another length of hose to its end. Attach additional lengths of hose as needed.

## Voltage and Circuit Protection

Refer to the Voltage and Minimum Branch Circuit Requirements under Pump/Motor Specifications.



**WARNING:** Risk of Overheating. Certain air compressors can be operated on a 15 amp circuit if the following conditions are met.

- Voltage supply to circuit must comply with the National Electrical Code.
- Circuit is not used to supply any other electrical needs.
- Extension cords comply with specifications.
- Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse. NOTE: If compressor is connected to a circuit protected by fuses, use only time delay fuses. Time delay fuses should be marked "D" in Canada and "T" in the US.

If any of the above conditions cannot be met, or if operation of the compressor repeatedly causes interruption of the power, it may be necessary to operate it from a 20 amp circuit. It is not necessary to change the cord set.

## Compatibility

Air tools and accessories that are run off the compressor must be compatible with petroleumbased products. If you suspect that a material is not compatible with petroleum products, an air line filter for removal of moisture and oil vapor in compressed air is required.

**NOTE:** Always use an air line filter to remove moisture and oil vapor when spraying paint.

#### Location

Place the air compressor in a clean, dry and well ventilated area at least 12" (30.5 cm) away from the wall or other obstructions that will interfere with the flow of air. Keep the compressor away from areas that have dirt and/or volatile furnes in the atmosphere. These impurities may clog the intake filter and valves, causing inefficient operation.



**WARNING:** The air compressor pump and shroud are designed to allow for proper cooling. The ventilation openings on the compressor are necessary to maintain proper operating temperature. Do not place rags or other containers on or near these openings.

Place the air compressor on a flat surface resting on the rubber feet and wheels.

#### OPERATION



WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

# Preparation for Use

## Pre-start Checklist (Fig. A, C)

- 1. Ensure the On/Off switch (1) is in the OFF position.
- Plug the power cord into the correct branch circuit receptacle. See Voltage and Circuit Protection under Installation.

- Ensure air tank is drained, see Draining Air Tank under Maintenance.
- 4. Ensure the drain valve (8) is closed.
- Ensure safety valve (7) is functioning properly, see Checking Safety Valve under Maintenance.
- Check pump oil level, see Compressor Pump OII under Maintenance

NOTICE: Do not operate without oil or with inadequate oil. DeWALT is not responsible for compressor failure caused by inadequate oil.

- Turn regulator knob (4) counterclockwise until fully closed. Ensure regulated pressure gauge reads 0 PSI (0 kPs)
- 8 Attach hose and accessories



#### WARNING: RISK OF UNSAFE OPERATION. FIRMLY GRASP HOSE IN HAND WHEN INSTALLING OR DISCONNECTING TO PREVENT HOSE WHIP.

 Ensure all covers and labels are in place, legible (for labels) and securely mounted. Do not use compressor until all items have been verified.



WARNING: Risk of bursting. Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.

## Initial Set-up (Fig. A, C)



**WARNING:** Do not operate this unit until you read and understand this instruction manual for safety, operation and maintenance instructions.

#### **Break-In Procedure**

**NOTICE:** Serious damage may result if the following break-in instructions are not closely followed.

This procedure is required **before** the air compressor is put into service for the first time and when the check valve or a compressor pump/motor has been replaced.

- Ensure the On/Off switch (1) is in the OFF position.
- Plug the power cord into the correct branch circuit receptacle. See Voltage and Circuit Protection under Installation
- Open the drain valve (counterclockwise) fully to permit air to escape and prevent air pressure build up in the air tank during the break-in period.
- Move the On/Off switch to the ON position. The compressor will start.
- 5. Run the compressor for 20 minutes.
- After 20 minutes, close the drain valve by turning clockwise. The tank will fill to *cutout* pressure and the motor will stop.
- Compressed air will be available until it is used or blod off

## Start-Up (Fig. A, C)

- 1. Follow Pre-Start Checklist under Preparation for Use.
- Move the On/Off switch to the ON position and allow tank pressure to build. Motor will stop when tank pressure reaches cut-out pressure.

NOTICE: Compressed air from the unit may contain water condensation and oil mist. Do not spray unfiltered air at an item that could be damaged by moisture. Some air operated tools or devices may require filtered air. Read the instructions for the air tool or device.

 Adjust regulator (4) to desired setting. See Regulator under Features.

## Shut-Down (Fig. A, C)

- Move On/Off switch is in the OFF position. NOTE: If finished using compressor, follow Steps 2 - 6.
- Turn regulator knob counterclockwise until fully closed. Ensure regulated pressure gauge reads 0 PSI (0 kPa).
- 3. Remove hose and accessory.



**WARNING:** Risk of unsafe operation. Firmly grasp air hose in hand when installing or disconnecting to prevent hose whip.

Drain the air tank, see Draining Air Tank under
 Maintenance. Ensure air tank pressure gauge reads 0
 PSI (0 kPa).



**WARNING:** Risk of bursting. Drain air tank daily. Water will condense in air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

- 5. Allow the compressor to cool down.
- Wipe air compressor clean and store in a safe, nonfreezing area.

#### Storage and Transporting

**NOTICE:** Risk of property damage. In order to avoid damaging the air compressor, do not allow the unit to be tilted more than 10° when operating.

## Transporting

When transporting the compressor in a vehicle, trailer, etc., ensure that the tank is drained and the unit is secured and placed on a flat horizontal surface. **NOTE:** Use recommended tie down straps when transporting. Use care when driving so to avoid tipping the unit over in the vehicle. Damage can occur to the unit or surrounding items if unit is tipped.

#### Lifting



CAUTION: Always use two people when lifting and lift from the recommended lift points (M & V).



**CAUTION:** The handle provided on a unit with wheels is only intended for the purpose of pushing or pulling the product.

#### Moving (Fig. A)



CAUTION: The wheels and handle do not provide adequate clearance, stability, or support for pulling the unit up and down stairs or steps. The unit must be lifted or pushed up a ramp.

 Grasp Handle (13) and tilt compressor so unit can be rolled on the tires.



**CAUTION:** Risk of unsafe operation. Ensure proper footing and use caution when rolling compressor so that unit does not tip or cause loss of balance.

When location is reached slowly lower compressor to ground. Always store compressor in a horizontal position. NOTE: Should the unit tip over, hard starting and smoking will occur due to oil spillage.

#### MAINTENANCE



WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

The following procedures must be followed when maintenance or service is performed on the air compressor.

- 1. Ensure On/Off switch is in the OFF position.
- 2. Remove air compressor plug from outlet.
- 3. Drain air tank.
- Allow air compressor to cool down before starting service

**NOTE:** All compressed air systems contain maintenance parts (e.g., oil, filters, separators) that are periodically replaced. These used parts may contain substances that are regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

**NOTE:** Take note of the positions and locations of parts during disassembly to make reassembly easier

NOTE: Any service operations not included in this section should be performed by DEWALT authorized service center.

#### Maintenance Chart

Procedure	Daily	Weekly	Monthly	1 year or 200 Hours	see tank warning label
Check safety valve (G)	χ				
Inspect air filter +		Х			
Drain air tank (H)	χ				
Check pump oil level (J)	χ				
Change pump oil**+				Х	
Oil leak inspection	Х				
Check for unusual noise/vibration	X				
Check for air leaks	χı				
Clean compressor exterior		Х			
Remove tank from service					χ²

- 1 To check for air leaks apply a solution of soapy water around joints. While compressor is pumping to pressure and after pressure cuts out, look for air bubbles to form.
- 2 Remove tank from service. For more information, call our Customer Care Center at 1-800-4-DEWALT

Procedure	Datly	Weekly	Monthly	1 year	see tank
				or 200	warning
				Hours	label

\*\* The pump oil must be changed after the first 20 hours of operation. Thereafter, when using ISO 100/SAF40, non-detergent, premium air compressor oil, change oil every 200 hours of operation or once a year, whichever comes first.

+ Perform more frequent in dusty or humid conditions

## Checking Safety Valve (Fig. A)



WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. B). Allow compressor to cool prior to servicing.



**WARNING:** Risk of bursting. If the safety valve does not work properly, over-pressurization may occur, causing air tank rupture or an explosion.



**WARNING:** Risk from flying objects. Always wear certified safety equipment:

ANSI Z87.1 eye protection (CAN/CSA Z94.3) with side shields when using the compressor.

Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve.

## Checking Air Filter Element (Fig. A, E)



**WARNING:** Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch. Allow compressor to cool prior to servicing.

- 1. Ensure the On/Off switch (1) is in the OFF position.
- 2. Allow unit to cool.
- 3. Remove air filter (12) from unit.
- If element needs cleaning, blow out with air. Replace if needed. Purchase replacement parts from your local dealer or authorized service center. Always use identical replacement parts.
- Reassemble air filter to unit. Ensure inlet points down. NOTICE: Risk of unsafe operation. Do not operate without air inlet filter

## Draining Air Tank (Fig. A)

NOTE: The amount of water drained from the tank after each use will depend on the time of use and the amount of humidity in the operating environment. If no water comes out of the drain valve, the valve may be clogged. If the valve is clogged, release all air pressure from tank. The valve can then be removed, cleaned and reinstalled.



WARNING: Risk of unsafe operation. Risk from noise. Air tanks contain high pressure air. Keep face and other body parts away from outlet of drain. Use safety glasses [ANSI Z87.1 (CAN/CSA Z94.3)] when draining as debris can be kicked up into face. Use ear protection [ANSI S12.6 (S3.19)] as air flow noise is loud when draining.

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g. tanks, filter, aftercoolers, dryers). This condensate contains lubricating

oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

- Ensure On/Off switch is in the OFF position.
- Place a suitable container under the drain valve to catch discharge
- When air tank pressure gauge reads 10 PSI (68,9 kPa), rotate valve to the fully open position.
- 4. Grasp knob on drain valve.
- 5. Slowly rotate knob to gradually bleed air from air tank.



WARNING: Risk of bursting. Drain air tank daily. Water will condense in air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

NOTICE: Risk of property damage. Drain water from air tank may contain oil and rust, which can cause stains.

6. Close drain valve when finished.

# Compressor Pump Oil (Fig. A, D, I, J)

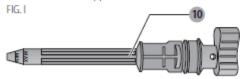
## Checking Oil



WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. B). Allow compressor to cool prior to servicing.

- 1. Ensure On/Off switch is in the OFF position.
- 2. Place unit on a flat level surface.
- 3. Remove dipstick (10) and wipe clean.
- Reinsert dipstick fully into oil fill port for a few seconds to allow oil to collect on the dipstick.
- Remove oil dipstick to read oil level. Oil should not exceed top raised line on dipstick. If oil is below lower mark, add ISO 100/SAE40, non-detergent, premium air compressor oil and follow Steps 4 - 6.

**NOTE:** When filling the crankcase, the oil flows very slowly into the pump. If the oil is added too quickly, it will overflow and appear to be full.



**NOTICE:** Risk of unsafe operation. Overfilling with oil will cause premature compressor failure. Do not overfill.

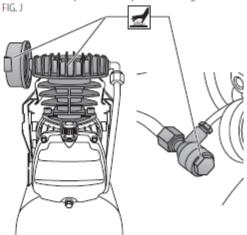
- 6. Replace dipstick.
- The crank case is full when the oil level reaches the top line on the dipstick.

## **Changing Oil**

**NOTE:** Pump oil contains substances that are regulated and must be disposed of in accordance with local, state and federal laws and regulations.



WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. I). Allow compressor to cool prior to servicing.



- 1. Ensure On/Off switch is in the OFF position.
- 2. Allow the unit to cool.
- 3. Remove air compressor plug from outlet.
- 4 Drain air tank
- Locate a suitable container under pump drain plug 11.
- 6. Remove the dipstick (10) from crankcase.
- Remove the oil drain plug (11).
- Allow ample time for all oil to drain out. (Tilting the compressor towards the drain plug will assist in draining.)
- Install the oil drain plug.
- Fill pump with ISO 100/SAE40, non-detergent, premium air compressor oil.
- 11. Replace dipstick.

## Accessories



WARNING: Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product.

Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286, call 1–800–4-DEWALT (1–800–433–9258) or visit our website: www.dewalt.com.

#### Repairs

The charger and battery pack are not serviceable.



WARNING: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by a DEWALT factory service center or a DEWALT authorized service center. Always use identical replacement parts.

## Register Online

Thank you for your purchase. Register your product now for:

- WARRANTY SERVICE: Registering your product will help you obtain more efficient warranty service in case there is a problem with your product.
- CONFIRMATION OF OWNERSHIP: In case of an insurance loss, such as fire, flood or theft, your registration of ownership will serve as your proof of purchase.
- FOR YOUR SAFETY: Registering your product will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act

Register online at www.dewalt.com/register.

## Full One Year Warranty

DEWALT heavy duty industrial tools are warranted for one year from date of purchase. We will repair, without charge, any defects due to faulty materials or workmanship. For warranty repair information, call 1–800–4-DEWALT (1–800–433–9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

**LATIN AMERICA:** This warranty does not apply to products sold in Latin America. For products sold in Latin America, see country specific warranty information contained either in the packaging, call the local company or see website for warranty information.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1–800–4-DeWALT (1–800–433–9258) for a free replacement.



#### GLOSSARY

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure of air delivery.

**PSIG:** Pounds per square inch gauge; a unit of measure of pressure.

kPa (kilopascal): Metric pressure measurement. 1 kilopascal equal 1000 pascals.

Code Certification: Products that bear one or more of the following marks: UL\*, CUL, CULUS, ETL\*, CETL, CETLUS, have been evaluated by OSHA certified independent safety laboratories and meet the applicable Standards for Safety. 
\*UL\* is a registered trademark of Underwriters Laboratories and ETL\* is a registered trademark of Electrical Testing

Cut-In Pressure: While the motor is off, air tank pressure drops when accessory is used. When the tank pressure drops to a certain low level the motor will restart automatically. The low pressure at which the motor automatically restarts is called cut-In pressure.

Cut-Out Pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off, protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called cut-out pressure.

**Branch Circuit:** The circuit carrying electricity from electrical panel to outlet.

**Duty cycle:** For proper operation of your air compressor, it is recommended that a 50% duty cycle be maintained; that is, the air compressor should not run more that 5 minutes in any 10 minute period.

## Troubleshooting Guide

This section provides a list of the more frequently encountered malfunctions, their causes and corrective actions. The operator or maintenance personnel can perform some corrective actions, and others may require the assistance of a qualified DeWALT technician or your dealer.

Problem	Code
Excessive air tank pressure-safety valve pops off	1, 2
Air leaks	3
Air leaks in air tank or at air tank welds	4
Air leaks between head and valve plate	5
Air leaks from safety valve	6
Knocking noise	6
Pressure reading on the regulated pressure gauge drops when an accessory is used	7
Compressor is not supplying enough air to operate accessories	8, 9, 10, 11, 12
Regulator knob has continuous air leak	13
Regulator will not shut off air outlet	13
Motor will not run	6, 14, 15, 16, 17, 18, 19, 20

## **Troubleshooting Codes**

	POSSIBLE CAUSE	POSSIBLE SOLUTION
1	Pressure switch does not shut off	Set the Auto/Off switch to OFF, if the unit does not shut off contact a DeWALT
ľ	motor when compressor reaches	factory service center or a DeWALT authorized service center.
	cut-out pressure	,
2	Pressure switch cut-out too high	Contact a DeWALT factory service center or a DeWALT authorized service center.
3	Tube fittings are not tight enough	Tighten fittings where air can be heard escaping. Check fittings with soapy
		water solution. Do Not Overtighten.
4	Defective air tank	Air tank must be replaced. Do not repair the leak.
		★ WARNING: Risk of bursting. Do not drill into, weld or otherwise
		modify air tank or it will weaken. The air tank can rupture or explode.
5	Leaking seals	Contact a DeWALT factory service center or a DeWALT authorized service center.
6	Defective safety valve	Operate safety valve manually by pulling on ring. If valve still leaks, it must be
ľ	Defective salety valve	replaced.
7	Regulator is not adjusted correctly	It is normal for some pressure drop to occur when an accessory is used, adjust
	for accessory being used	the regulator as instructed in <b>Regulator</b> under <b>Features</b> if pressure drop is
		excessive.
		<b>NOTE:</b> Adjust the regulated pressure under flow conditions while accessory is being used.
8	Prolonged excessive use of air	Decrease amount of air usage.
9	Compressor is not large enough	Check the accessory air requirement. If it is higher than the CFM or pressure
	for accessory	supplied by your air compressor, a larger compressor is needed to operate
		accessory.
10	Hole in air hose	Replace air hose.
-11	Check valve restricted	Contact a DeWALT factory service center or a DeWALT authorized service center.
12	Air leaks	Tighten fittings.
13	Regulator is damaged	Replace.
14	Motor overload protection switch	Refer to Motor Overload Protection under Features. If motor overload
	has tripped	protection trips frequently, contact a DeWALT factory service center or a
		DeWALT authorized service center.
15	Tank pressure exceeds pressure	Motor will start automatically when tank pressure drops below cut-in pressure
16	switch cut-in pressure Extension cord is wrong length	of pressure switch.  Check for proper gauge wire and cord length. Refer to the Extension Cords
16	or gauge	paragraph in the <b>Installation</b> section.
17	Loose electrical connections	Contact a DeWALT factory service center or a DeWALT authorized service center.
18	Possible defective motor	Contact a DeWALT factory service center or a DeWALT authorized service center.
19	Paint spray on internal motor	Contact a DeWALT factory service center or a DeWALT authorized service
	parts	center. Do not operate the compressor in the paint spray area. See flammable
		vapor warning.
20	Fuse blown, circuit breaker	Check fuse box for blown fuse and replace as necessary. Reset circuit breaker.
	tripped	Do not use a fuse or circuit breaker with higher rating than that specified for
		our particular branch circuit.
		Check for proper fuse. You should use a time delay fuse.
		Check for low voltage conditions and/or proper extension cord.
		Disconnect the other electrical appliances from circuit or operate the
		compressor on its own branch circuit.