

TECHQUIP

AIR COMPRESSORS



OWNER'S MANUAL

**TECHQUIP OWNER'S MANUAL
REF. (2.2002)
TECHQUIP AIR COMPRESSORS**

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INSTALLATION & OPERATING INSTRUCTIONS

OPERATION

Your TECHQUIP COMPRESSOR must be placed in a clean and well ventilated room. Your TECHQUIP COMPRESSOR should be located at least 12 to 18 inches away from a wall or other obstruction that will interfere with the flow of air through the fan bladed flywheel.

Your TECHQUIP COMPRESSOR should be as near as possible to outlets to avoid long pipe runs. Do not place compressor where heat is excessive.

All electrical connections should be made by a licensed electrician. Ensure that wiring meets local code requirements. The voltage supplied to the electric motor must be as specified on the name plate of the motor.

LUBRICATION

CAUTION: Before operating compressor, fill crankcase with a naphthenic base low carbon content industrial compressor oil. During break-in, careful and regular checking of the oil level should be exercised.

The recommend viscosity for ambient temperatures above 32°F is SAE30, and for temperatures below 32°F, SAE20. Do not mix oil types, weights, or brands.

Your Techquip dealer carries the correct oil.

MAINTENANCE

1. Drain tank weekly.
2. Check crankcase oil level weekly.
3. Drain and replace crankcase oil every 500 actual hours, or 90 days, whichever occurs first.
4. Use compressor oil.
5. Keep air intake filters clean. Do not wash element. Blow dirt from element from inside with light air pressure.
6. Check belts for tension or wear each week. Belt tension should be adjusted to allow approximately 3/8 - 1/2 inch deflection with normal thumb pressure.
7. When closing each day, turn power and air line off.
8. **Protect compressor from freezing temperatures.**
9. Each week turn power off and clean dust and foreign material from cylinder head, motor, fan blade, air lines, intercooler, and tank.

TECHNICAL DATA

	TQ25	TQ30	TQ50
HP	3	5	7.5
STAGES	2	2	2
CYLINDERS	2	2	2
BORE" LP	3.54	4.13	4.72
BORE" HP	1.97	2.05	2.36
STROKE"	2.56	3.31	3.74
MAX. RPM	950	800	800
PISTON DISPL.	16.03	20.52	30.33
ACFM AT 40 PSIG	13.30	17.44	25.78
ACFM AT 100 PSIG	11.54	16.82	23.66
VALVING	REED	REED	REED
LUBRICATION	SPLASH	SPLASH	SPLASH
FLYWHEEL DIAM.	15.16	15.16	21.65
V BELTS	2-A	2-A	2-B
HEAD		ALUMINUM	
VALVE PLATE		CAST IRON	
CYL WALL		CAST IRON	
CRANKCASE		ALUMINUM	
BEARINGS	BALL BEARING MAINS ● INSERT ROD BEARINGS		
MODELS	ALL 3 HP MODELS	ALL 5 HP MODELS	ALL 7.5 HP MODELS

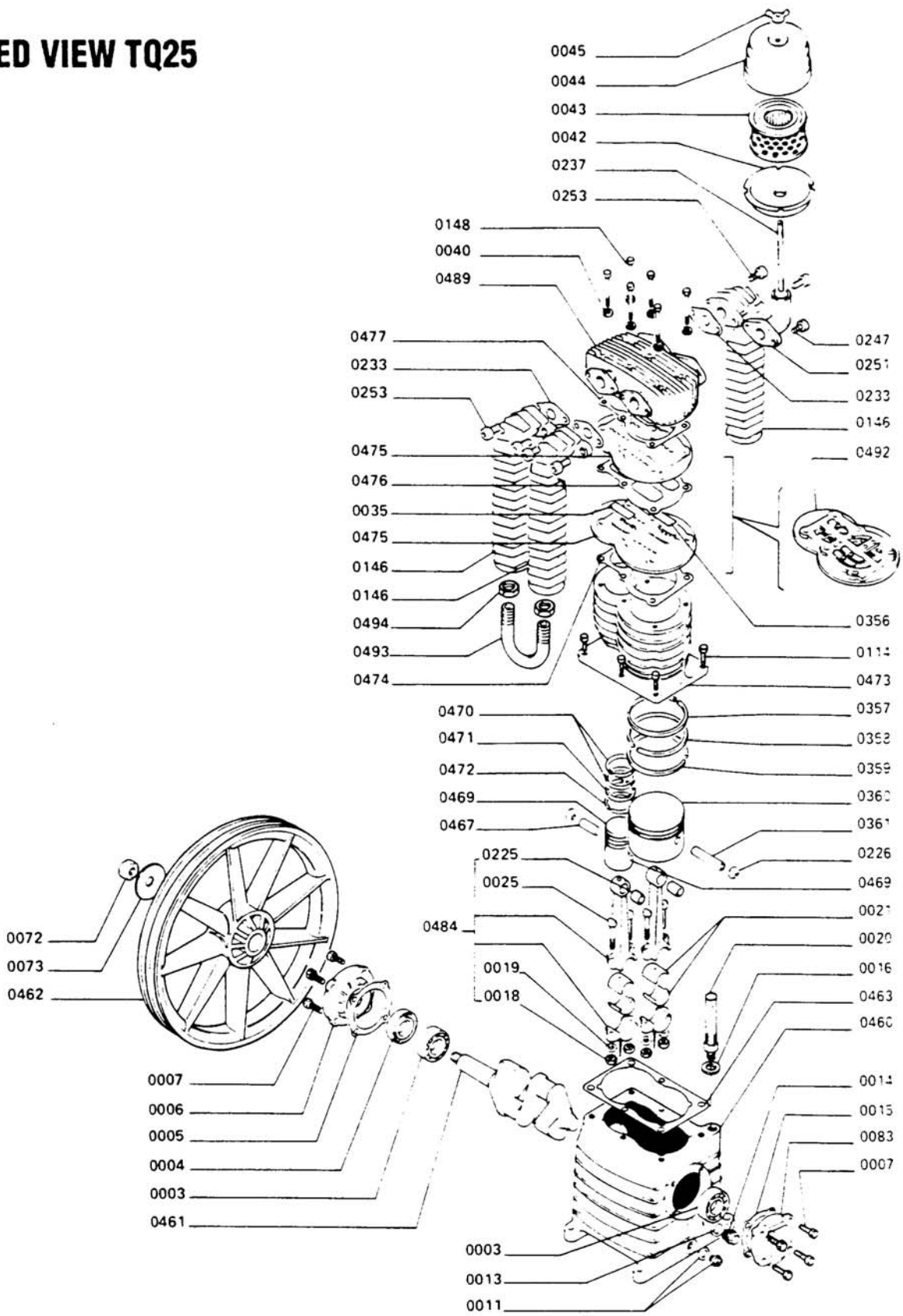
PARTS BREAKDOWN LISTING FOR TECHQUIP MOD. TQ25 COMPRESSOR

0460	CRANKCASE	0357	RING COMPRESSION
0461	CRANKSHAFT	0470	RING COMPRESSION
0003	BEARING	0473	CYLINDER
0004	BEARING	0114	SCREW
0005	GASKET	0474	GASKET
0006	FLANGE	0475	VALVE PLATE
0007	SCREW	0477	GASKET
0462	FLY WHEEL	0478	CYLINDER HEAD
0009	WASHER	0480	SCREW
0010	NUT	0040	WASHER
0011	PLUG	0482	ELBOW
0012	FLANGE	0481	TENSION ROD
0013	GASKET	0236	FILTER COVER
0014	OIL LEVEL	0238	FILTER CARTRIDGE
0015	GASKET	0235	FILTER CASING
0016	GASKET	0045	NUT
0020	OIL PLUG	0247	SCREW
0463	GASKET	0233	GASKET
0018	NUT	0483	FLANGE
0019	WASHER	0209	INTERCOOLER L
0021	INSERT BRNG. HLF.	0210	INTERCOOLER R
0464	CON. ROD	0234	GASKET
0025	SCREW	0211	INTERCOOLER FLNG.
0225	BUSHING	0248	SCREW
0226	C. CLIP		
0361	PISTON PIN LP	TQ25RK	RING KIT
0467	PISTON PIN	TQ25GK	GASKET KIT
0360	PISTON LP	TQ25VK	VALVE KIT
0469	PISTON HP	TQ25HRK	HEAD REPAIR KIT
0359	RING-OIL SCRAPER LP		
0472	RING-OIL SCRAPER HP		
0358	RING-OIL SCRAPER LP		
0471	RING-OIL SCRAPER LP		

NOTE: WHEN ORDERING PARTS INDICATE

- PART NUMBER
- DESCRIPTION OF PART
- QUANTITY NEEDED

EXPLODED VIEW TQ25



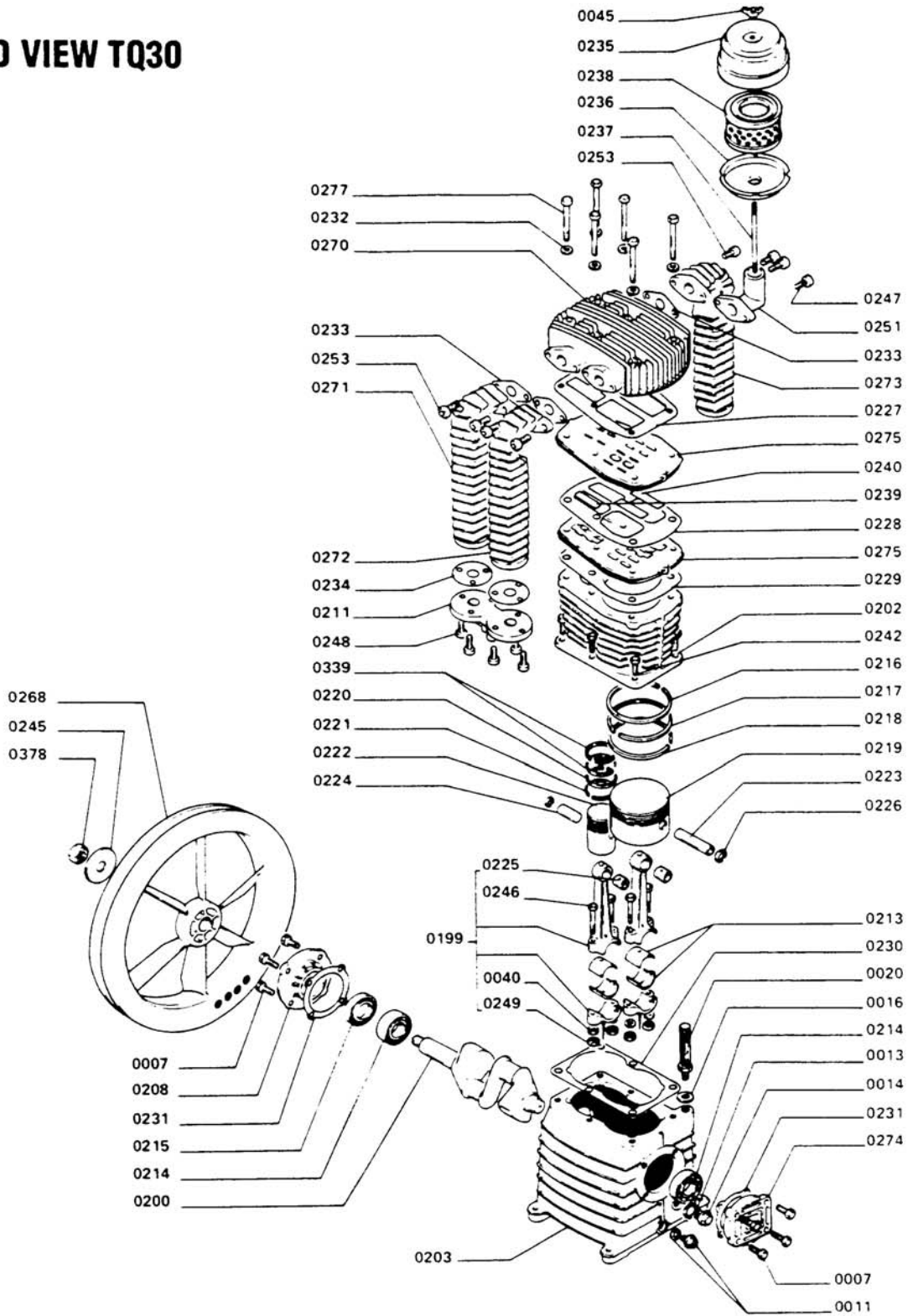
PARTS BREAKDOWN LISTING FOR TECHQUIP MOD. TQ30 COMPRESSOR

0203	CRANKCASE	0339	RING-COMPRESSION HP
0200	CRANKSHAFT	0202	CYLINDER
0214	BEARING	0242	SCREW
0215	BEARING	0229	GASKET
0231	GASKET	0204	VALVE PLATE
0208	FLANGE	0240	VALVE LP
0007	SCREW	0239	VALVE HP
0206	PULLEY	0228	GASKET
0245	WASHER	0252	SPLIT PIN
0244	NUT	0227	GASKET
0011	OIL PLUG	0205	CYLINDER HEAD
0207	FLANGE	0241	SCREW
0013	GASKET	0232	WASHER
0014	OIL LEVEL	0236	FILTER COVER
0016	GASKET	0238	ELEMENT
0020	OIL PLUG	0235	FILTER CASING
0230	GASKET	0045	WING-NUT
0249	NUT	0237	TENSION ROD
0040	WASHER	0251	ELBOW
0213	INSERT BRNG. HLF.	0243	SCREW
0201	CON. ROD	0212	AFTERCOOLER
0226	C. CLIP	0247	SCREW
0225	BUSHING	0233	GASKET
0246	SCREW	0209	INTERCOOLER L
0223	PISTON PIN LP	0210	INTERCOOLER R
0224	PISTON PIN HP	0234	GASKET
0219	PISTON LP	0211	INTERCOOLER FLNG.
0222	PISTON HP	0248	SCREW
0218	RING-OIL SCRAPER LP		
0221	RING-OIL SCRAPER HP		
0217	RING-OIL SCRAPER LP	TQ30RK	RING KIT
0220	RING-OIL SCRAPER LP	TQ30GK	GASKET KIT
0216	RING-COMPRESSION LP	TQ30VK	VALVE KIT
		TQ30HRK	HEAD REPAIR KIT

NOTE: WHEN ORDERING PARTS INDICATE

- **PART NUMBER**
- **DESCRIPTION OF PART**
- **QUANTITY NEEDED**

EXPLODED VIEW TQ30



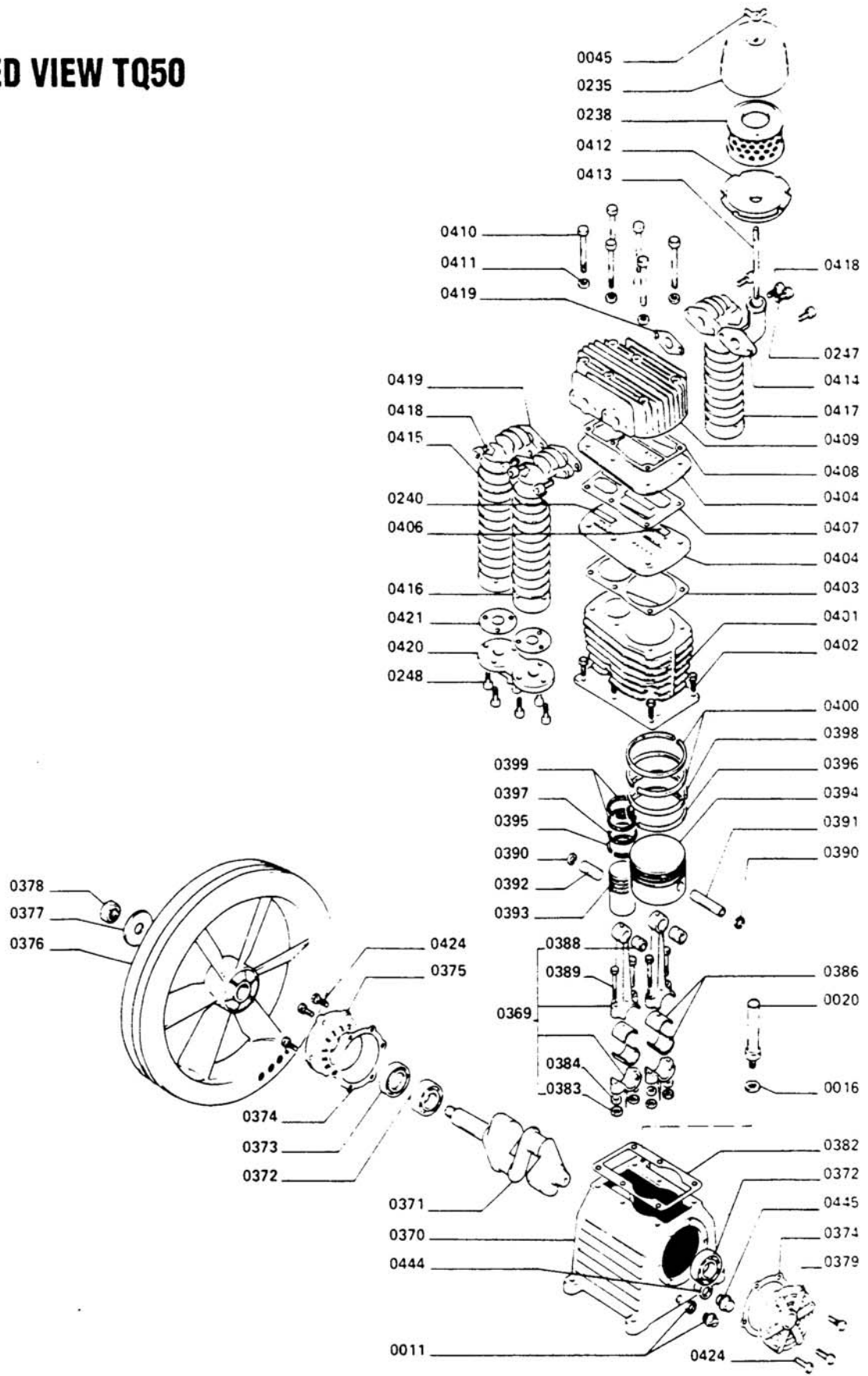
PARTS BREAKDOWN LISTING FOR TECHQUIP MOD. TQ50 COMPRESSOR

0011	OIL PLUG	0395	SLOTTED OIL SCRAPER RING HP
0016	GASKET	0396	SLOTTED OIL SCRAPER RING LP
0020	OIL PLUG	0397	STEPPED SCRAPER RING HP
0045	NUT	0398	STEPPED SCRAPER RING LP
0235	FILTER CASING	0399	COMPRESSION RING HP
0238	FILTER CARTRIDGE	0400	COMPRESSION RING LP
0240	VALVE HP	0401	CYLINDER
0247	SCREW	0402	SCREW
0248	SCREW	0403	GASKET
0369	COMP. CONNECTION ROD	0404	VALVE PLATE
0370	CRANKCASE	0406	VALVE LP
0371	CRANKSHAFT	0407	GASKET
0372	BALL BEARING	0408	GASKET
0373	BI-ANGULAR BEARING	0409	CLYINDERHEAD
0374	GASKET	0410	SCREW
0375	SUPPORT	0411	WASHER
0376	FLYWHEEL	0412	FILTER COVER
0377	WASHER	0413	TENSION ROD
0378	NUT	0414	ELBOW
0379	SUPPORT	0415	LEFT COOLER
0382	GASKET	0416	RIGHT COOLER
0383	NUT	0417	AFTERCOOLER
0384	WASHER	0418	SCREW
0386	INSERT BRNG. HLF	0419	GASKET
0388	BUSH	0420	CONNECTOR
0389	SCREW	0421	GASKET
0390	CIRCLIP	0424	SCREW
0391	PISTON PIN LP	0444	GASKET
0392	PISTON PIN HP	0445	OIL SIGHT GAUGE
0393	PISTON HP		
0394	PISTON LP	TQ50RK	RINK KIT
		TQ50GK	GASKET KIT
		TQ50VK	VALVE KIT
		TQ50HRK	HEAD REPAIR KIT

NOTE: WHEN ORDERING PARTS INDICATE

- ***PART NUMBER***
- ***DESCRIPTION OF PART***
- ***QUANTITY NEEDED***

EXPLODED VIEW TQ50



"TABLE B" - ELECTRICAL WIRING

All electrical connections should be made by a licensed electrician and in accordance with the electrical code for the particular area. Wiring must be such that full motor nameplate voltage plus or minus 10% is available at the motor terminals during starting. Recommended wire sizes are as follows.

WIRE SIZE (RUBBER COVERED) - AWG NUMBER

Copper Conductor - 75° C Temp. Rating - 30° Ambient.

MOTOR H.P.	SINGLE PHASE			3 PHASE			
	120V	208V	230V	208V	230V	460V	575V
1/4	14	14	14	14	14	14	14
1/3	14	14	14	14	14	14	14
1/2	14	14	14	14	14	14	14
3/4	12	14	14	14	14	14	14
1	12	14	14	14	14	14	14
1-1/2	10	14	14	14	14	14	14
2	10	12	12	14	14	14	14
3	8	10	10	14	14	14	14
5		8	8	10	12	14	14
7-1/5			6	10	10	14	14
10			6	8	8	12	14
15				6	6	10	10
20				4	4	8	10
25				3	4	8	8

Wiring hook-up must be made so that the flywheel will turn as indicated by arrow on flywheel. Based on 1990 National Electrical Code.