OPERATOR'S MANUAL

Boomer

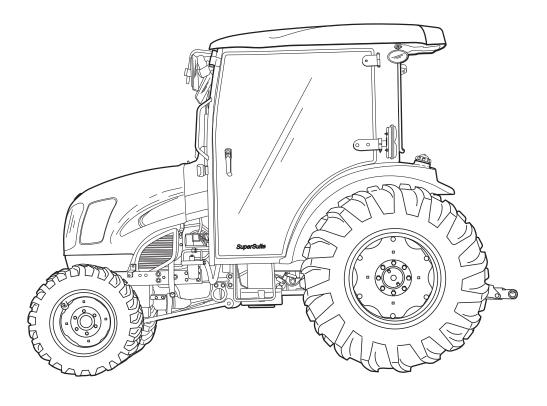
3040

3045

3050

With Cab and (EasyDrive[™]) CVT Transmission

Compact Tractor



Part number 84382266 4th edition English June 2011 Replaces part number 84307323



Contents

1	GENERAL INFORMATION	
	Note to the Owner	1-1
	Foreword Ecology and the Environment	
	General specification - Biodiesel Fuels	
	Advice	
	Torque - Minimum Tightening Torques for Normal Assembly	
	HYDRAULIC, PNEUMATIC, ELECTRICAL, ELECTRONIC SYSTEMS - Torque - Sta	andard
	torque data for hydraulics	
	Diesel fuel	
	Machine orientation	
	Product Identification Number (PIN)	
	Electro-Magnetic Compatibility (EMC)	. 1-12
2	SAFETY INFORMATION	
	Precautionary statements and signal word definitions	2-1
	Safety rules	
	Starting the tractor	
	Using the tractor	
	Towing and transport	
	Using implements and agricultural machinery	
	Stopping the tractor	
	Servicing the tractor	
	Proposition 65	
	Personal safety	
	Safety rules	
	ROPS - Personal safety - Roll-over protective structure	
	ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Personal safety	
	Safety signs	
	Instructional decals	
	International symbols	
	international dymbold	. 2 20
3	CONTROLS/INSTRUMENTS	
	ACCESS TO OPERATOR'S PLATFORM	
	Doors	3-1
	OPERATOR'S SEAT	
	USER CONTROLS AND SEAT Operator seat - Adjust	3-1
	Seat belt - Adjust	
	EODWADD CONTDOLS	
	FORWARD CONTROLS	3 3
	Steering wheel - Adjust	
	Instrument panel	
	ADIC foult godge. Transmission related	
	ADIC fault codes - Transmission related	. ა-∠ა

Hand throttle lever Front window wiper/washer Windscreen washer reservoir	. 3-26
LEFT-HAND SIDE CONTROLS Transmission shuttle shift lever. CVT transmission controls 2WD-4WD SYSTEM - Control. Differential control	. 3-28 . 3-31
RIGHT-HAND SIDE CONTROLS Throttle command Pedal - Control identification Fuel shut-off - Control PTO controls. Hydraulic power lift (HPL) Rear remote control valve(s) Front remote control valve	3-343-353-383-38
REARWARD CONTROLS Rear window. Auxiliary power outlet (if equipped). Rear window wiper/washer.	. 3-39
OVERHEAD CONTROLS ENVIRONMENT CONTROL - Overview ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Adjust Cab air filters Sun shades Cab internal lighting	. 3-42 . 3-46 . 3-47
EXTERIOR CONTROLS Hood latch Mirror Rear view mirror - Adjust	. 3-48 . 3-48
4 OPERATING INSTRUCTIONS COMMISSIONING THE UNIT CVT transmission controls - Settings and adjustments Recommended operating mode settings PTO operation Extendable drawbar Deluxe three-point linkage.	. 4-12 . 4-14 . 4-15
STARTING THE UNIT Start control Start switch - Control identification. Pre-heating the system. STARTING SYSTEM - Dynamic description	. 4-17

	STOPPING THE UNIT Stopping the engine	4-22
	SERVICE BRAKE - Control PARKING BRAKE - Control	4-23
	TARRING BRARE - CONTOL	4-20
5	TRANSPORT OPERATIONS	
	ROAD TRANSPORT	
	LIGHTING SYSTEM - Identification	5-2
	RECOVERY TRANSPORT	
	Preparation for towing	5-6
6	WORKING OPERATIONS	
O	GENERAL INFORMATION	
	Fuel tank - Fill	6-1
	ENGINE - Running-in Procedure Driving the tractor	
	Tractor hydraulics	
	PRIMARY HYDRAULIC POWER SYSTEM - Safety rules	
	Hydraulic power lift (HPL) Position control	
	Hydraulic lift rocker	6-4
	HPL drop rate control valve Hydraulic manifold block/diverter valve	
	Rear remote control valve(s)	
	Rear remote valve configuration	
	Front remote control valve	6-6
7	MAINTENANCE	
	GENERAL INFORMATION	
	Safety rules	
	Diesel fuel Toolbox	
	MAINTENANCE CHART	
	Maintenance Chart	7-4
	ENGINE LUBRICATION SYSTEM - Check	7-9

LUBRICATION SYSTEM - Change fluid	7-10
FUEL AND INJECTION SYSTEM FUEL AND INJECTION SYSTEM - Drain fluid	7-12 7-13
AIR INTAKE SYSTEM Air cleaner - Check Air cleaner - Cleaning Primary element	7-15 7-16
Air cleaner - Replace Inner safety element TRANSMISSION TRANSMISSION - Check TRANSMISSION - Change fluid Oil filter - Replace Oil filter - Replace	7-17 7-18 7-18
Oil filter - Replace ELECTRICAL POWER SYSTEM Battery - Check Alternator - Check Fuse and relay box - Replace	7-20 7-21
LIGHTING SYSTEM Head light - Replace Taillight Turn/hazard light - Replace Cab Work Lights	7-27 7-28
WHEELS AND TRACKS Wheels WHEELS AND TRACKS Wheels - Check. WHEELS AND TRACKS Wheels - Tighten. WHEELS AND TRACKS Wheels - Adjust.	7-32
SERVICE BRAKE SERVICE BRAKE - Adjust PARKING BRAKE - Adjust	
FRONT AXLE Differential - Check Front Axle Differential Case and Final Reduction Gear Differential - Change fluid Front Axle Differential Case and Final Reduction Gear	Case Oil
STORAGE	7 00

Storage - Storing - Tractor	‡2 ‡3
CAB Cab frame - Check	14 14
ENVIRONMENT CONTROL Air-conditioning system ENVIRONMENT CONTROL Air-conditioning system - Check	
ENGINE COOLANT SYSTEM ENGINE COOLANT SYSTEM - Check Coolant Level 7-4 ENGINE COOLANT SYSTEM - Drain fluid 7-4 Thermostat - Replace 7-4 Fan and drive Belt - Check 7-4 Fan and drive Belt - Adjust 7-5	18 19 19
8 SPECIFICATIONS Consumables Wheel tread settings WHEELS AND TRACKS Wheels - Weight Power Production - General Specification FRAME AND CAB - Dimension 8-1	-2 -3 -4
9 ACCESSORIES Front ballasting - Install	-3 -5 -6 -6 -6
10 FORMS AND DECLARATIONS Delivery report - Owner Copy	

1 - GENERAL INFORMATION

Note to the Owner

This manual contains information concerning the adjustment and maintenance of your new equipment. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the performance and long service built into this equipment. Please have all operators read this manual carefully and keep it available for ready reference.

Your NEW HOLLAND AGRICULTURE dealer will instruct you in the general operation of your new equipment. (Refer to the 'Delivery Report' at the back of this manual.) Your dealer's staff of factory-trained service technicians will be glad to answer any questions that may arise regarding the operation of your machine. New Holland Top Service is also available. Call 1-866-NEWHLND (1-866-639-4563) or email na.topservice@cnh.com.

Your NEW HOLLAND AGRICULTURE dealer carries a complete line of genuine NEW HOLLAND AGRICULTURE service parts. These parts are manufactured and carefully inspected to insure high quality and accurate fitting of any necessary replacement parts. Be prepared to give your dealer the model and product identification number of your new equipment when ordering parts. Locate these numbers now and record them below. Refer to the 'General Information' section of this manual for the location of the model and product identification numbers of your machine.

PLEASE RECORD THE FOLLOWING INFORM Model	IATION
Product Identification Number (PIN)	
Date Purchased	
Header Width (As Applicable)	
Engine Model (As Applicable)	
Engine PIN (As Applicable)	



This is the safety alert symbol. It is used with and without signal words to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

▲ WARNING

Illustrations in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.

Replace all shields before operating the machine.

Failure to comply could result in death or serious injury.

W0012A

IMPROVEMENTS

CNH America LLC is continually striving to improve its products. We reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

Foreword Ecology and the Environment

Soil, air, and water are vital factors of agriculture and life in general. When legislation does not yet rule the treatment of some of the substances which are required by advanced technology, common sense should govern the use and disposal of products of a chemical and petrochemical nature.

NOTICE: The following are recommendations which may be of assistance:

- Become acquainted with and ensure that you understand the relative legislation applicable to your country.
- Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, antifreeze, cleaning agents, etc., with regard to their effect on man and nature and how to safely store, use and dispose of these substances.
- Agricultural consultants will, in many cases, be able to help you as well.

HELPFUL HINTS

- Avoid filling tanks using cans or inappropriate pressurized fuel delivery systems which may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of them contain substances which may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when draining off used engine coolant mixtures, engine, gearbox and hydraulic oils, brake fluids, etc. Do not mix drained brake fluids or fuels with lubricants. Store them safely until they can be disposed of in a proper way to comply with local legislation and available resources.
- Modern coolant mixtures, i.e. antifreeze and other additives, should be replaced every two years. They should not be allowed to get into the soil but should be collected and disposed of properly.
- Do not open the air-conditioning system yourself. It contains gases which should not be released into the atmosphere. Your NEW HOLLAND AGRICULTURE dealer or air conditioning specialist has a special extractor for this purpose and will have to recharge the system properly.
- Repair any leaks or defects in the engine cooling or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.
- Protect hoses during welding as penetrating weld splatter may burn a hole or weaken them, allowing the loss of oils, coolant, etc.

General specification - Biodiesel Fuels

Fatty Acid Methyl Ester Biodiesel (Biodiesel Fuel) consists of a family of fuels derived from vegetable oils treated with methyl esters.

NOTICE: Biodiesel Fuel blends are approved for your engine only if they comply with **EN14214** Specification Standards or **ASTM D6751**.

NOTICE: It is imperative that you check which blend is approved for your engine with your NEW HOLLAND AGRICULTURE dealer. Be aware that the use of Biodiesel Fuel that does not comply with the Standards mentioned above could lead to severe damage to the engine and fuel system of your machine. The use of fuels that are not approved may void NEW HOLLAND AGRICULTURE Warranty coverage.

Biodiesel Fuel Usage Conditions

NOTICE: The Biodiesel Fuel must meet the fuel Specification mentioned above.

Biodiesel Fuel must be purchased from a trusted supplier that understands the product and maintains good fuel quality. Biodiesel Fuel must be pre-blended by the supplier. Mixing Biodiesel Fuels on-site can result incorrect mixture that can lead to problems with both engine and fuel system.

Engine performance is affected by the use of Biodiesel Fuel. There may be up to **12** % reduction in power or torque depending on the blend used.

NOTICE: DO NOT modify the engine and/or injection pump settings to recover the reduced performance.

The reduced power must be accepted if using any Biodiesel Fuel blend.

Some modification may be required to allow your engine to run Biodiesel Fuel. Consult you dealer for complete information on these modifications.

Biodiesel Fuel has a higher cloud point than Diesel Fuel.

NOTICE: The use of high Biodiesel Fuel blends are not recommended in cold weather conditions.

With Biodiesel Fuels, it may be necessary to change the engine oil, engine oil filter and fuel filter elements more frequently than with Diesel Fuels. Biodiesel Fuel can remove rust and particles from the inside of on-site fuel storage tanks that would normally adhere to the sides of the tank. Like particle deposits that commonly occur with Diesel Fuel, these particles can become trapped by the machine fuel filters, causing blockage and shortening filter life. In cold weather, this is more likely to happen. Consult your NEW HOLLAND AGRICULTURE dealer for information on cold weather operation and proper maintenance intervals when using any Biodiesel Fuel blend.

When handling Biodiesel Fuel, care must be taken not to allow water into the fuel supply. Biodiesel Fuel will actually attract moisture from the atmosphere.

Fuel tanks must be kept as full as possible to limit the amount of air and water vapors in them. It may be necessary to drain the fuel filter water tap more frequently.

Potential oxidation and stability could be a problem with the fuel stored in the machine.

NOTICE: Machines must not be stored for more than three months with Biodiesel Fuel blends in the fuel system.

If long storage periods are necessary, the engine must run on Diesel Fuel for 20 hours to flush the Biodiesel Fuel out of the engine fuel system prior to storage.

NOTICE: Biodiesel Fuel must not be stored in on-site storage tanks for more than three months.

Any spillage of Biodiesel Fuel must be cleaned up immediately before it can cause damage to the environment and the paint finish of the machine.

Before using Biodiesel Fuel blends you should consult with your dealer to receive full information about the approved blend for your machine and any detailed conditions of its usage.

NOTICE: Be aware that not fulfilling the requirements and conditions of Biodiesel Fuel usage will void your machine's NEW HOLLAND AGRICULTURE Warranty coverage.

Advice

This machine was designed to power and propel itself. It is intended for agricultural use to pull or carry tractor attachments or load and move materials when equipped with a front end loader with a variety of buckets.

PROHIBITED USAGE

No parts or attachments should be fitted to this machine, which have not been released by NEW HOLLAND AGRI-CULTURE. They might affect machine operation, safety of the user or other people, stability or wear characteristics of the machine.

NOTICE: Use only approved accessories and attachments designed for your machine. Consult your dealer on changes, additions or modifications that may be required for your machine. Do not make any unauthorized modifications to your machine.

NOTICE: DO NOT use this machine for any purpose or in any manner other than as described in the manual, decals, or other product safety information provided with the machine. These materials define the machine's intended use.

NOTICE: The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealer, customers, operators and users is strictly prohibited by law. Failure to comply could result in government fines, rework charges, invalid warranty, legal action and possible confiscation of the machine until rework to original condition is completed. Engine service and/or repairs must be done by a certified technician only!

NOTE: All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permits.

Torque - Minimum Tightening Torques for Normal Assembly

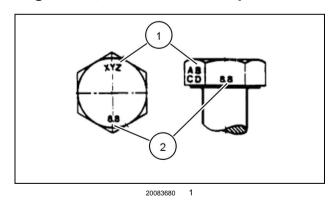
METRIC NON-FLANGED HARDWARE

NOM. SIZE				LOCKNUT CL.8	LOCKNUT CL.10	
	CLASS 8.8 CLASS		CLASS 10.9 CLASS		W/CL8.8 BOLT	W/CL10.9 BOLT
	UNPLATED	PLATED W/ZnCr	UNPLATED	PLATED W/ZnCr		-
M4	2.2 N·m (19 lb in)	2.9 N·m (26 lb in)	3.2 N·m (28 lb in)	4.2 N·m (37 lb in)	2 N·m (18 lb in)	2.9 N·m (26 lb in)
M5	4.5 N·m (40 lb in)	5.9 N·m (52 lb in)	6.4 N·m (57 lb in)	8.5 N·m (75 lb in)	4 N·m (36 lb in)	5.8 N·m (51 lb in)
M6	7.5 N·m (66 lb in)	10 N·m (89 lb in)	11 N·m (96 lb in)	15 N·m (128 lb in)	6.8 N·m (60 lb in)	10 N·m (89 lb in)
M8	18 N·m (163 lb in)	25 N·m (217 lb in)	26 N·m (234 lb in)	35 N·m (311 lb in)	17 N·m (151 lb in)	24 N·m (212 lb in)
M10	37 N·m (27 lb ft)	49 N·m (36 lb ft)	52 N·m (38 lb ft)	70 N·m (51 lb ft)	33 N·m (25 lb ft)	48 N·m (35 lb ft)
M12	64 N·m (47 lb ft)	85 N·m (63 lb ft)	91 N·m (67 lb ft)	121 N·m (90 lb ft)	58 N·m (43 lb ft)	83 N·m (61 lb ft)
M16	158 N·m (116 lb ft)	210 N·m (155 lb ft)	225 N·m (166 lb ft)	301 N·m (222 lb ft)	143 N·m (106 lb ft)	205 N·m (151 lb ft)
M20	319 N·m (235 lb ft)	425 N·m (313 lb ft)	440 N·m (325 lb ft)	587 N·m (433 lb ft)	290 N·m (214 lb ft)	400 N·m (295 lb ft)
M24	551 N·m (410 lb ft)	735 N·m (500 lb ft)	762 N·m (560 lb ft)	1016 N·m (750 lb ft)	501 N·m (370 lb ft)	693 N·m (510 lb ft)

NOTE: M4 through M8 hardware torque specifications are shown in pound-inches. M10 through M24 hardware torque specifications are shown in pound-feet.

IDENTIFICATION

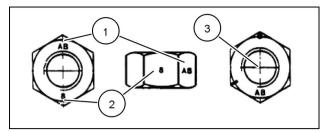
Metric Hex head and carriage bolts, classes 5.6 and up



1. Manufacturer's Identification

2. Property Class

Metric Hex nuts and locknuts, classes 05 and up



20083681

- 1. Manufacturer's Identification
- 2. Property Class

Clock Marking of Property Class and Manufacturer's Identification (Optional), i.e. marks 60 ° apart indicate Class 10 properties, and marks 120 ° apart indicate Class 8.

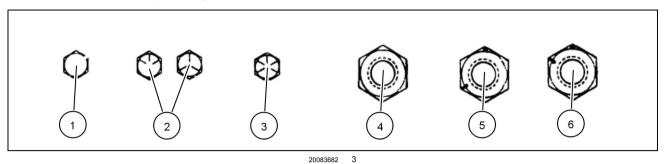
INCH NON-FLANGED HARDWARE

NOMINAL SIZE	SAE GRAD			DE 8 BOLT NUT	LOCKNUT GrB W/ Gr5 BOLT	LOCKNUT GrC W/ Gr8 BOLT
	UN- PLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UN- PLATED or PLATED SILVER	PLATED W/ZnCr GOLD		
1/4	8 N·m (71 lb in)	11 N·m (97 lb in)	12 N·m (106 lb in)	16 N·m (142 lb in)	8.5 N·m (75 lb in)	12.2 N·m (109 lb in)
5/16	17 N·m (150 lb in)	23 N·m (204 lb in)	24 N·m (212 lb in)	32 N·m (283 lb in)	17.5 N·m (155 lb in)	25 N·m (220 lb in)
3/8	30 N·m (22 lb ft)	40 N·m (30 lb ft)	43 N·m (31 lb ft)	57 N·m (42 lb ft)	31 N·m (23 lb ft)	44 N·m (33 lb ft)
7/16	48 N·m (36 lb ft)	65 N·m (48 lb ft)	68 N·m (50 lb ft)	91 N·m (67 lb ft)	50 N·m (37 lb ft)	71 N·m (53 lb ft)
1/2	74 N·m (54 lb ft)	98 N·m (73 lb ft)	104 N·m (77 lb ft)	139 N·m (103 lb ft)	76 N·m (56 lb ft)	108 N·m (80 lb ft)
9/16	107 N·m (79 lb ft)	142 N·m (105 lb ft)	150 N·m (111 lb ft)	201 N·m (148 lb ft)	111 N·m (82 lb ft)	156 N·m (115 lb ft)
5/8	147 N·m (108 lb ft)	196 N·m (145 lb ft)	208 N·m (153 lb ft)	277 N·m (204 lb ft)	153 N·m (113 lb ft)	215 N·m (159 lb ft)
3/4	261 N·m (193 lb ft)	348 N·m (257 lb ft)	369 N·m (272 lb ft)	491 N·m (362 lb ft)	271 N·m (200 lb ft)	383 N·m (282 lb ft)
7/8		561 N·m (413 lb ft)	594 N·m (438 lb ft)	791 N·m (584 lb ft)	437 N·m (323 lb ft)	617 N·m (455 lb ft)
1			890 N·m (656 lb ft)		654 N·m (483 lb ft)	924 N·m (681 lb ft)

NOTE: For Imperial Units, 1/4 in and 5/16 in hardware torque specifications are shown in pound-inches. 3/8 in through 1 in hardware torque specifications are shown in pound-feet.

IDENTIFICATION

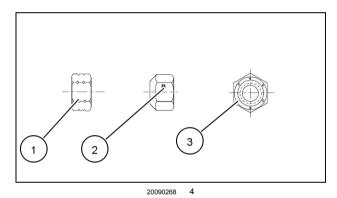
Inch Bolts and free-spinning nuts



Grade Marking Examples

SAE Grade Identification					
1	Grade 2 - No Marks	4	Grade 2 Nut - No Marks		
2	Grade 5 - Three Marks	5	Grade 5 Nut - Marks 120 ° Apart		
3	Grade 8 - Five Marks	6	Grade 8 Nut - Marks 60 ° Apart		

Inch Lock Nuts, All Metal (Three optional methods)



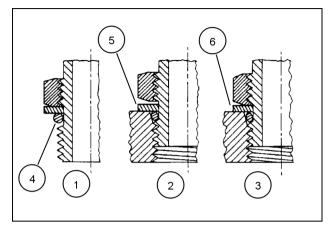
Grade Identification

Grade	Corner Marking Method (1)	Flats Marking Method (2)	Clock Marking Method (3)
Grade A	No Notches	No Mark	No Marks
Grade B	One Circumferential Notch	Letter B	Three Marks
Grade C	Two Circumferential Notches	Letter C	Six Marks

HYDRAULIC, PNEUMATIC, ELECTRICAL, ELECTRONIC SYSTEMS - Torque - Standard torque data for hydraulics

INSTALLATION OF ADJUSTABLE FITTINGS IN STRAIGHT THREAD O RING BOSSES

- 1. Lubricate the O-ring by coating it with a light oil or petroleum. Install the O-ring in the groove adjacent to the metal backup washer which is assembled at the extreme end of the groove (4).
- 2. Install the fitting into the SAE straight thread boss until the metal backup washer contacts the face of the boss (5).
 - **NOTE:** Do not over tighten and distort the metal backup washer.
- 3. Position the fitting by turning out (counterclockwise) up to a maximum of one turn. Holding the pad of the fitting with a wrench, tighten the locknut and washer against the face of the boss (6).



23085659

STANDARD TORQUE DATA FOR HY-DRAULIC TUBES AND FITTINGS

	TUBE NUTS	O-RING BOSS PLUGS ADJUSTABLE FITTING LOCKNUTS, SWIVEL JIC- 37° SEATS		
SIZE TUBING OD THREAD SIZE			TORQUE	TORQUE
4	6.4 mm (1/4 in)	7/16-20	12 - 16 N·m (9 - 12 lb ft)	8 - 14 N·m (6 - 10 lb ft)
5	7.9 mm (5/16 in)	1/2-20	16 - 20 N·m (12 - 15 lb ft)	14 - 20 N·m (10 - 15 lb ft)
6	9.5 mm (3/8 in)	9/16-18	29 - 33 N·m (21 - 24 lb ft)	20 - 27 N·m (15 - 20 lb ft)
8	12.7 mm (1/2 in)	3/4-16	47 - 54 N·m (35 - 40 lb ft)	34 - 41 N·m (25 - 30 lb ft)
10	15.9 mm (5/8 in)	7/8-14	72 - 79 N·m (53 - 58 lb ft)	47 - 54 N·m (35 - 40 lb ft)
12	19.1 mm (3/4 in)	1-1/16-12	104 - 111 N·m (77 - 82 lb ft)	81 - 95 N·m (60 - 70 lb ft)
14	22.2 mm (7/8 in)	1-3/16-12	122 - 136 N·m (90 - 100 lb ft)	95 - 109 N·m (70 - 80 lb ft)
16	25.4 mm (1 in)	1-5/16-12	149 - 163 N·m (110 - 120 lb ft)	108 - 122 N·m (80 - 90 lb ft)
20	31.8 mm (1-1/4 in)	1-5/8-12	190 - 204 N·m (140 - 150 lb ft)	129 - 158 N·m (95 - 115 lb ft)
24	38.1 mm (1-1/2 in)	1-7/8-12	217 - 237 N·m (160 - 175 lb ft)	163 - 190 N·m (120 - 140 lb ft)
32	50.8 mm (2 in)	2-1/2-12	305 - 325 N·m (225 - 240 lb ft)	339 - 407 N·m (250 - 300 lb ft)

These torques are not recommended for tubes of 12.7 mm (1/2 in) OD and larger with wall thickness of 0.889 mm (0.035 in) or less. The torque is specified for 0.889 mm (0.035 in) wall tubes on each application individually.

Before installing and torquing 37 ° flared fittings, clean the face of the flare and threads with a clean solvent or Loctite

cleaner and apply hydraulic sealant ${\bf LOCTITE} {\bf @ 569}$ to the ${\bf 37}$ ° flare and the threads.

Install fitting and torque to specified torque, loosen fitting and retorque to specifications.

Thank you so much for reading. Please click the "Buy Now!" button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com